DOCUMENT RESUME

ED 413 532 CE 075 277

TITLE	Report on the Vocational Education and Training System: Former Yugoslav Republic of Macedonia.
INSTITUTION	European Training Foundation, Turin (Italy).
PUB DATE	1997-00-00
NOTE	74p.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Adult Education; Case Studies; Early Childhood Education; Educational Environment; *Educational Needs; *Educational Practices; Educational Research; *Educational Trends; Elementary Education; Financial Support; Foreign Countries; International Cooperation; International Educational Exchange; *Labor Market; Management Development; Needs Assessment; Postsecondary Education; Program Development; Secondary Education; *Sociocultural Patterns; Trend Analysis; *Vocational Education
IDENTIFIERS	*Macedonia

ABSTRACT

The vocational education and training (VET) system of the Former Yugoslav Republic of Macedonia was studied by two consultants who visited the country and held discussions with senior officials from selected government ministries, universities, trade unions, and vocational schools. The study focused on the following: Macedonia's socioeconomic and labor market situations; the structure, administration, and financing of preschool, elementary, secondary, postsecondary, and adult education and training; and international assistance to VET. Case studies of vocational schools in five cities were also conducted. It was concluded that, in view of the significant changes under way in Macedonia's socioeconomic structure and labor market, the country's VET system must progressively reduce the proportion of resources allocated to acquisition of specialized vocational skills and expand the level of resources devoted to teaching transferable core skills. (The report 20 references and 10 tables. Appended are the following: current/proposed groupings and profiles; existing gymnasium curriculum; proposed teaching plan framework for gymnasium education; existing health curriculum; existing electrical and technical curriculum; proposed teaching plan frameworks for 3-year and 4-year VET; facilities of universities in Skopje and Bitola; and plans to establish a European Union national observatory in Macedonia.) (MN)

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Report on the vocational education and training system

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REPORT

Former Yugoslav Republic of Macedonia

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The European Training Foundation is an agency of the European Union which works in the field of vocational education and training in Central and Eastern Europe, the New Independent States and Mongolia. The Foundation also provides technical assistance to the European Commission for the Tempus Programme.

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Acknowledgements

The consultants wish to acknowledge the exceptional level of professional assistance and personal hospitality which they received throughout their visit to the Republic of Macedonia. They greatly appreciate the efforts which were made on their behalf in arranging meetings and providing documentation.

A considerable number of people assisted the consultants during the mission. However, a special word of thanks goes to Ms. Milena Corradini, European Training Foundation, who gave us great support in the implementation of this study; Fanitsa Hristova, Undersecretary for Secondary Education at the Ministry of Education and Physical Culture, who was responsible for arranging an extensive range of meetings with Ministers and Senior Officials of the Government of Macedonia, and Katerina Sumanovska of the Department of International Co-operation at the Ministry. Katerina provided translation and organised many of the meetings with the schools and was indeed an ever-present source of assistance to the consultants throughout the duration of the mission.

The consultants also wish to express their gratitude to Dr. Don Dunkle and his team of Wes Pfeiffer and Craig Hagen of the United States Department of Labour with whom they enjoyed a most fruitful professional relationship. Special thanks must also go to Dermot Stokes of the Curriculum Development Unit, Dublin, for his constructive comments during the preparation of this report.

Of the many individuals who gave valuable assistance during the mission, the consultants wish to mention the following in particular:

Mrs Sofisa Todorova, Minister, MOE; Tome Gorgiec, Director, "GORCE PTROV", Agricultural School of Kavadarci; Lence Gerouska, Undersecretary, MOE; Dragica Bogeva, MOE; Blacoja Krstanovski, Assistant Minister for Finance, MOE; Dr. Bobek Suklev, Dean Faculty of Economics; Dr. Stanka Slaveska, Acting Director, Pedagogical Institute; Blagoja Petrusevski, Deputy Ministry, Ministry of Economy; Ms. Elena Mihajovska, Pedagogical Institute of Macedonia; Stojan Trajanov, Undersecretary, MOL; ACO Spasovski, Chamber of Commerce; Jim Stevens/Emily Andrews, World Bank; Ms. Verica Hadzi Vasileva - Markovska, Agency of the Republic of Macedonia, Transition of Enterprises with Social Capital; Dimce Nastevski, Secretary, MOE; Victor Sopov, Secretary, MOE - District Office Tetovo; Slobodanka Tasevska, Assistant Minister, Ministry of Development; Aco Jankulovski, President, Educational Union; Pero Nakovski, Director, Agricultural Secondary School, Tetovo School District; Sultana Kanevce, MOE - Ohrid; Jordan Angelovskik, Director, Workers University "KOCO RACIN"; Makedonka Jovik, District Unit Secretary, MOE - Veles; Gorgi Lumburovski, Secretary, MOE - District Office Bitola; Ignat Donevski, Director, Skopje Driving School and Auto Mechanics; Konstantin Petrovski, Director, "GORGI NAUMOV" School - Bitola; Katerina Sumanovska, Dept. for International Cooperation, MOE; Vladimir Milkin, Director,

Spomenka Lazarevska Program Coordinator, Open Society Institute; Ms. Olga Mijajlova - Tikvarovska M.A., Director, P.R. & Promotion Unit, Agency for the Republic of Macedonia for Transformation of Enterprises with Social Capital; Jjupco Hovcegarski, Secretary General Economic Chamber of Commerce; Maurizio Locatelli, Michael Kilcommons, Nafi Saracini, Phare Implementation Office.

Frank Kavanagh
John Mcgrath
FÁS International Consulting Ltd.
February 1997

LIST OF ACRONYMS

ACU	Aid Co-ordination Unit
CBC	Cross Border Co-operation Programme
COP	Country Operational Programme
EBRD	European Bank for Reconstruction and Development
ECHO	European Community Humanitarian Office
ERL	Economic Recovery Loan
EU	European Union
FRM	Former Yugoslav Republic of Macedonia
FSRY	Federal Socialist Republic of Yugoslavia
GNP	Gross National Product
GDP	Gross Domestic Product
IFAD	International Fund for Agricultural Development
ILO	International Labour Organisation
IMF	International Monetary Fund
MIP	Multi-annual Indicative Programme
MOE	Ministry of Education and Physical Culture
MOL	Ministry of Labour and Social Protection
NB	National Bank
PIP	Public Investment Programme
PIM	Pedagogical Institute
SAL	Structural Adjustment Loan
SME	Small and Medium Enterprises
SOP	Sector Operational Programme
STF	Systemic Transformation Facility
TA	Technical Assistance
TP	Training Provider

USAID	United States Agency for International Development
VET	Vocational Education and Training
WB	World Bank
WU	Workers University

Chapter 1: Background

1.1 Introduction

This report was prepared by FAS International Consulting Ltd[1] who were commissioned by the European Training Foundation to undertake an analysis of the Vocational Educational Training System (VET) of the Former Yugoslav Republic of Macedonia (FRM). During the course of this study, two consultants from FAS International visited FRM between 8th. and 22nd. December 1996 and subsequently, one consultant made a return visit during the week beginning 3rd. February 1997.

During these visits, the consultants held discussions with senior officials of the Ministry of Education and Physical Culture, the Ministry of Finance, the Ministry of Economy, the Ministry of Development, the Ministry of Labour and Social Affairs, the Pedagogical Institute of Macedonia (PIM), the Institute of Statistics, Soros Foundation, the Chambers of Commerce, the Faculty of Economics at St. Cyril and Methodius University, the Trade Unions, the Faculty of Philosophy-Pedagogical Division, the Phare Implementation Office, the Privatisation Agency and the Workers University at Skopje. In addition, the consultants made study trips to a number of different Municipalities and they held detailed discussions with the management of a considerable number of vocational schools.

1.2 Overall Situation

FRM is currently undergoing a period of profound change. From the second world war until the achievement of independence in 1991, it has been an integral part of the Federal Socialist Republic of Yugoslavia (FSRY). The legacy of that political relationship still dominates the country's education system. Elementary education, which caters for children between the ages of 7 and 15, is compulsory and this has resulted in a very high degree of basic education and literacy - one of the positive legacies of the former socialist system. However, second-level education, which begins at age 15, is highly specialised and it is designed primarily to provide the student with a specific traditional technical skill. The market economy which is emerging in FRM is unable to absorb these skills to any significant extent and there is widespread and chronic unemployment among those who have graduated from this system in recent years.

While the education system met many past needs, it is now generally accepted that it is no longer meeting the needs of the emerging new structures both in society and the economy - this is particularly so in relation to VET. The core structure of the

[1] FÁS International Consulting Limited, Ireland is the technical co-operation arm of Ireland's National Employment and Training Authority.

education system was established in 1974-80 with some reforms implemented in 1991- mainly the reintroduction of Gymnasia.

It is structured as follows: Pre-School (1-7yrs.), Elementary Compulsory (7-14yrs.), Secondary Vocational and Gymnasium (15-19yrs.), Higher Education (19-25yrs.).

The VET system, which is the focus of this report, has its origins in the desire of the previous regime to supply workers skilled in particularly narrow and segmented occupations for a centrally planned industrial and economic structure.

The new Constitution of Yugoslavia (1974) and the Associated Labour Act (1976) specified the overall socio-economic framework for previous educational reform. On this basis reforms were implemented in the late seventies. The general principle was that all levels of education after primary school should fulfil a double function:

1. To develop the capabilities and skills needed for direct engagement in specific occupations as well as the capabilities and knowledge needed for continuation of schooling up to the highest levels.

2. That the "dualism" of secondary school be overcome i.e. that the division into Gymnasia with open access to higher education, and vocational schools with no such aspect, be abolished. (Gymnasia were abolished in 1980)

In the Republics laws on "Career-oriented education" or "Directed Education" (Serbo-Croat: *usmjereno obrazovanje)* were passed. These changes were apparently driven by industrial interests i.e. the demand side. The idea was to produce workers with specific skills for the economy through an "egalitarian" education system.

Secondary Vocational Education had the following elements which have not changed radically down to the present day:

- 2/3 year courses producing students with "semi-skilled" and "skilled" qualifications. The curriculum consisted of general and vocational subjects and so called "Production Practice" i.e. for a number of hours per week students were placed in industry but in reality it is understood that very little real work experience was obtained and in some cases consisted of " floor-sweeping"

- 4 year courses producing students with "Technician" qualifications. The curriculum again consisted of general and vocational subjects with some on the job training and a higher proportion of vocational specialisation in the 3rd and 4th years. In the latter part of the 1980's placement in industry was difficult because of the mismatch between qualifications and the industrial environment and concomitant economic down-turn. A high proportion of students went on to 3rd level and a minority found work in administration and management in industry.

After the reforms introduced in 1974-80 some large scale evaluation studies were carried out particularly in Slovenia and Serbia and which reflected the picture in FRM.

One of the main findings was that the introduction of career-orientated or "directed" education in secondary schools did not help to minimise social discrimination or to widen access to higher education for students from lower social strata. Another was that the *dualism* of the secondary school system persisted in a different form in that some secondary schools took on the role of the former grammar or gymnasium schools.

There is an acceptance that the schools moved to a position which was neither general or vocational. It was evident that 20-30% of pupils could not master the general education curriculum. They were able to acquire 1st and 2nd level skills (general worker, semi-skilled worker) but many were unable to become skilled workers (3rd level worker-not in the academic sense) because the standards of the general education programmes were too high.

In 1990/91 Gymnasia were reintroduced because the previous reforms were regarded as not meeting the educational needs of the FRM population and the idea of a single type of secondary school was abandoned. Selectivity was reintroduced with only the most capable entering Gymnasia (c.25% of the compulsory school graduates).

The secondary VET system was re-confirmed in the remaining schools and provides the possibility of acquiring skills at several specifically differentiated levels:

- VET for simple jobs lasting from 1-2 years (1st and 2nd level skills)
- VET lasting 3 yrs. For skilled workers (3rd level skills)
- VET lasting 4 yrs for technicians (4th level skills)
- Informal vocational training for employed persons and adults for all levels of skills
- Special Courses of higher secondary training for employed persons who would like to receive advanced training (5th level skills)

At present there are 92 secondary schools of which 11 are Gymnasia and the remainder either Vocational (56) or a mix of Vocational and Gymnasia in the same building (25). In the Vocational schools there is training for 183 narrowly defined occupations within 26 broad occupational clusters. Recently proposed reforms will reduce the occupations to 111 within 15 broad clusters.

70.1% of all secondary school students are enrolled in the vocational schools. 9% go into short occupational courses lasting 6 months-2 yrs., 33.2 % are in 3 year programmes and 27.9% in 4 yr. programmes and the remaining 29.9% of the secondary student cohort are enrolled in Gymnasia.

The present demand for school places is exactly the opposite in that it is expected c. 70% of 1997 elementary school-leavers will apply for places in Medical/Health and Economy/Secretarial schools and Gymnasia. This reflects the general perception that

many Vocational schools do not provide students with marketable skills in the context of an economy in rapid transformation.

1.3 Strategy for VET

Against a background of rapidly rising unemployment among school-leavers, the Government's education strategy revolves around 5 key objectives; to radically reform the curricula of the education system - particularly at second-level; to introduce modern teaching methodologies; to improve administrative efficiency; to enhance the performance of teachers and students; and to ensure equity for all citizens in the provision of education.

Progress has already been achieved on some of these issues. For example, the Government has recently accepted proposals from the country's Pedagogical Institute (PIM) on the rationalisation of the curricula in the secondary schools and legislation has been enacted which in time will result in the creation of new teacher and student assessment procedures. The private sector is being encouraged to create Gymnasia schools in response to the demand from parents and children for a more broad-based education and legislation is being prepared which will modernise the third-level education sector[2] .

Nevertheless, much work needs to be done to prepare the education system for the needs of a market economy. For example, the PIM estimate that there are over 150 different curricula which have yet to be designed and large numbers of teachers must be retrained to deliver these programmes. The PIM does not have sufficient resources to complete these tasks and some of the recommendations in this report are designed to assist the PIM in this regard.

Lack of resources, however, while it is a critical constraint, is by no means the only one. The Government has inherited an educational structure from the FSRY which is not geared to providing the type of skills which are required by a market economy. Since independence, industry has had little or no role to play in either the design of curricula or the delivery of training in the VET system. Consequently, many vocational schools have continued to provide courses in technical skills for which there is no demand.

There are other elements also which, while they are an integral part of any VET system in a market economy, are largely absent from the system inherited from the FSRY. For example, there is only limited management training - a crucial deficiency in view of the fact that the current management cadre in FRM has had no experience of trading in a market economy. Similarly, adult training, while it is an essential

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[2] The 'Law of the University' (not yet passed at the time of writing) will promote greater autonomy for the universities and equal access to higher education for all. Cf. Johanna Crighton, World Bank Report on Education Rehabilitation Project Identification, December 1996

vehicle for the replenishment of skills in market economies, is only provided to a very limited extent by either private industry or the State.

These deficiencies in the structure of the VET system in FRM reflect the influence of the philosophical approach to human resources management of the former FSRY. Under that system, the over-riding objective of education was to prepare the student for a life-long career in a particular technical vocation - an objective which was easily attainable within the exigencies of a socialist economic order. But it is much too specialised for a market economy where career changes are the norm and where the utilisation of modern technology has made a high level of general education an essential component in the acquisition of many vocational skills.

Chapter 2 . The Socio-Economic System.

2.1 Introduction

There are two important features of the country's political and economic structure which have an important bearing on its vocational and educational training system. Firstly, the multi-ethnic nature of its population which is reflected in the fact that VET is provided in four different languages. Secondly, the collapse of the manufacturing and construction sectors between 1992 and 1995 which were the traditional source of much of the employment of school-leavers - particularly from the secondary vocational schools. The dramatic decline in these sectors is one of the important factors underlying the urgent need for a radical restructuring of the VET system in FRM.

2.2 The Physical Structure and Population.

FRM covers an area of 25413 sq. km. It is situated in the Southeast corner of Europe. It borders on four countries, the Federal Republic of Yugoslavia to the North, the Republic of Greece to the South, and the Republics of Albania and Bulgaria to the West and East respectively.

It is a land-locked, predominantly mountainous terrain. Forests and woodland constitute about 30% of the total land area with a further 30% made up of meadows, pastures, arable land and crops. Although the winters can be quite cold, the climate in FRM is warm and sunny for much of the year and it is suitable for the cultivation of vines, tobacco and fruits.

The population is about 2.1 million and it is growing at approximately 1% per year. It is made up of Macedonians (65%), Albanians (22%), Turks (4%), Serbs (2%), Gypsies (3%) and other (4%). The fertility rate is just over 2.02 and life expectancy is 74 years. The population is relatively youthful with 25% under 14 years of age and 67% between the working age of 15-64 years. Approximately 58% of the population live in urban areas and almost a half a million of these live in the capital Skopje. Some of the more remote rural areas, particularly in the west of the country, are sparsely populated and this has contributed to the under-utilisation of the facilities of many rural-based schools.

2.3 The Political System.

FRM became an independent sovereign state in November 1991. At that time, Yugoslavia was disintegrating rapidly and the choice facing Macedonians was either to create an independent State of their own or to become part of the new Federal Republic of Yugoslavia - which is made up of Serbia and Montenegro and which is dominated politically by the Serbs.

The first democratic elections were held in November 1990 under the former constitution and Mr. Kiro Gligorov was elected President for a four year period. Subsequently, Mr. Gligorov was re-elected following the elections of October 1994.

He formed a coalition government composed of three parties, the Social Democratic Union (SDSM), the Socialist Party and the Liberal Party. A fourth party - the Party for Democratic Prosperity - has since joined this coalition government. The Liberal Party, however, resigned from the coalition in February 1996 over the allocation of ministerial portfolios.

The country is divided into 34 local administrative units or *ostinas*; Berova, Bitola, Makedonski Brod, Debar, Delcevo, Gevgelija, Gostivar, Kavardaci, Kicevo, Kocani, Kratovo, Kriva Palanka, Krusevo, Kumanovo, Murgasevo (Demir Hisar), Negotino, Ohrid, Prilep, Probistip, Radovis, Resen, Skopje-Centar, Skopje-Cair, Skopje-Karpos, Skopje-Kisela Voda, Skopje-Gaza Baba, Stip, Struga, Strumica, Sveti-Nicole, Tetova, Titov-Veles, Valandova, Vinica.

A challenge to the political stability of the republic arises from a combination of the multi-ethnic nature of the FRM and the countries on its borders and the current political upheaval in Serbia. There are over 6.5 million ethnic Albanians living in the Balkan Region of which just over 4 million reside in Albania itself. Almost 2 million others reside in the Serbian province of Kosovo which is adjacent to FRM's northern borders, while roughly 450,000 live in FRM itself. The Albanians in Kosovo are poorly integrated into Serbian society and there is a danger that if there is a major political upheaval in Serbia with adverse consequences for the Albanian community in Kosovo, these tensions could spill over into FRM and Albania.

Since the creation of the Republic, successive governments have been very conscious of the need to fully integrate the various ethnic minority groups into Macedonian society and this objective is reflected in much of the legislation. Thus for example, with regard to the education system, each of the main ethnic minority groups, Albanians, Turks, Serbs and Gypsies have a legal right to receive education in their mother tongue at first, second and third level. There is a quota system in operation in the universities which ensures that at least 10% of all students are from the ethnic minority communities. While these provisions can give rise to practical difficulties in respect of the allocation of classrooms and teachers, such inconveniences are considered a small price to pay for the promotion of greater social cohesion in a Region which, historically, has frequently demonstrated its enormous potential for political instability.

In general, the Government of FRM has been successful in achieving a greater level of integration of the ethnic nationalities into Macedonian society and this is reflected in the inclusion in the Government coalition of the predominantly Albanian Party for Democratic Prosperity. Inevitably, however, tensions still remain and in the context of the education system, they are reflected in the current debate over the proposal to use Macedonian as the sole language of instruction in higher education.

2.4 The Legislative Framework

Under the Constitution of 1991, every parent has the right to and the responsibility to ensure their children's education (Art. 4), elementary education (i.e. generally for children between the ages of 7 and 15 years) is compulsory and free (Art. 44) private educational institutions may be established for all levels of education except elementary (Art 45) and minorities have the right to instruction in their mother tongue. (Art. 48)

The educational provisions under the Constitution have been further refined and developed through the enactment of a number of laws. The most important of these are the Elementary Education Law and the Secondary Education Law (September 1995). These laws have specified the grading and assessment systems to be used in the elementary and secondary school system and the introduction from the year 2002 of a new 'Matura' examination.

The structure of higher education is a legacy of the 1985 Law on Vocational Training. This law reflects the education philosophy which prevailed in the Federal Socialist Republic of Yugoslavia under which all post-elementary education was designed primarily to provide a level of specialisation in a particular vocation. This law has been modified by article 46 of the 1991 Constitution which granted autonomy to the university sector and which stipulated that higher education must be governed by separate legislation which, in addition to granting greater autonomy to all third-level institutions, would ensure equal access to university for all citizens. This 'Law on the University' is due to be enacted presently.

2.5 The Economic System

The republic was one of the poorer regions of the former FSRY and much of its trade was to other regions within Yugoslavia. Consequently, the United Nations trade embargo on Serbia in May 1992 stripped the fledging Republic of its principal market from the outset. In addition, the name of the new Republic was unacceptable to Greece because of its similarity with the historic title of their northern provinces and they imposed a unilateral trade embargo which closed the critically important port of Tessaloniki to exporters to the Mediterranean and the Middle-East. Although the ports of Durres on Albania's Adriatic cost, and Burgas on the Black Sea in Bulgaria remained open, the road infrastructure to these ports is so poor that the logistics of transport are difficult.

The result of these embargoes was that for the first few years of its existence, the Republic was virtually cut-off from all its traditional export markets. The subsequent loss of those markets triggered a sharp reduction in manufacturing output in particular and GDP fell dramatically during 1992 and 1993. The construction sector was also severely damaged due to a decline in domestic investment and the loss of its traditional markets for international construction services in the Middle-East where access difficulties were compounded by the Gulf War.

To add to these problems, the FRM inherited, from the former FSRY, an economic structure which needed reform in order to compete in the international arena and an inflation rate which was rising rapidly.

The economy in FRM had been developed according to the principles of market socialism which prevailed within the FSRY. Under that system, all enterprises were owned by the society. The managers, who were responsible for the day to day operation of enterprises, were elected by workers councils. Consequently, managers were more favourably disposed towards increases in wages and employment rather than capital investment. The legacy of this system is apparent in FRM today where machinery in many industries and in most of the vocational schools, is significantly out of date.

The general economic situation, however, has improved significantly in the last two years. This improvement was occasioned by a number of factors. Since 1994, the Government has pursued strict monetary and fiscal policy in a determined effort to bring down the inflation rate. This tight budgetary approach has produced dividends and the inflation rate is now well down to single figures and falling. The Government introduced its own currency ' the Macedonian Denar' (exchange rate roughly $1 = 41 denars) and its has remained relatively stable. The decline in GDP was finally arrested in 1995 and it is anticipated that 1996 will record a slight increase in growth for the first time since independence and this trend is expected to continue into 1997.

The lifting of the United Nations Trade Embargo has re-opened access for FRM to its traditional markets in Serbia, while Greece has opened up its northern borders thus providing access to the important Middle-East markets. The opening up of trade links with the outside world has been further enhanced through the signing of a number of bilateral agreements with Germany and Austria.

The Government of FRM has hastened the emergence of a market economy through a massive privatisation process and through the promotion of a macro-economic climate which is conducive to the creation of enterprise. Over 800 formerly socially-owned companies have been privatised since 1993 and the Government has set a target of 1,200 by the end of 1996. In addition, the favourable economic climate has resulted in the registration of approximately 80,000 new companies of which over 30,000 are actively trading. A Privatisation Agency has been set up to oversee the transfer of formerly socially-owned enterprises into private ownership and this process is almost complete. The next stage - the privatisation of the agro-kombinats and the provision of on-going support to the newly created companies - is about to begin.

The privatisation process has been assisted by a Special Restructuring Programme which was designed with the assistance of the World Bank and which has resulted in the restructuring of 23 of the 25 largest loss making enterprises.

There are however, doubts about the long-term viability of many of the newly privatised companies. The decision to sell socially-owned enterprises has not attracted

the interest of foreign companies to any great extent and, to date, only 8 enterprises have been purchased by foreign buyers. The typical purchase has taken the form of an employee buy-out in respect of the smaller companies and a management buy-out in respect of the larger ones. Under these circumstances, it is difficult to envisage the emergence of more efficient management practices especially as management training for either adults or students, is virtually absent from the vocational training system in FRM.

The combination of recession and the privatisation of enterprises has had a major impact on employment. The typical exports from FRM included semi-processed manufactured goods such as ferrous metal components, iron and steel, and textiles and consumer goods - mainly clothing and footwear. The loss of export markets in the former FSRY, and the Middle-East has resulted in a dramatic decline in output from these sectors.

Indeed before 1996, agriculture was the only sector to record any growth. The relatively benign Macedonian climate confers a natural comparative advantage on the country in respect of the cultivation of grapes, tobacco and certain fruits and there is distinct potential for the development of a high value-added food and drink processing industry.

From the perspective of the VET system in FRM, the significance of the collapse of manufacturing is that historically these sectors were responsible for much of the recruitment of graduates from the vocational schools system. Consequently, many of the students completing second-level vocational education today are qualified in skills which are no longer required by the economy - a mismatch which is reflected in the disproportionate levels of unemployment among school-leavers from the VET system in recent years (see chapter 3).

Little has been done to fundamentally change the type of second-level education students receive, other than the reintroduction of Gymnasia. To some extent, the problem is a practical one. Such change is very difficult in view of the dominant position which 'technical specialisation' enjoyed for many years within the education system of FRM.

To some extent, the problem also stems from a lack of appreciation of the needs of a modern market economy. There is a belief among the management of some schools that many of the manufacturing companies which were forced to close during the recession will re-open again when the economy picks-up and will resume recruiting graduates from their courses as before.

This is unlikely to be the case. The structure of industry which will emerge from the current privatisation process will almost certainly be significantly different from the historical profile and it will reflect many of the features of the economic structure of market economies generally. Enterprises will be much smaller and many of them will be in the services sector rather than in manufacturing. The life-span of

enterprises will also be much shorter and many workers will be required to change jobs over the course of their working life. Self-employment will increase and there will be a proliferation of owner-managed companies particularly in the financial services, personal services and the retail trade - indeed this trend has already begun (see chapter 3).

Those manufacturing companies who do survive the restructuring process will have to significantly update their capital stock. Computer numerically controlled (CNC) will replace manually operated machines and a knowledge of electronics and instrumentation will become more important than the traditional mechanical skills in the maintenance and operation of production equipment. Management expertise in marketing and finance will be essential and school-leavers who are proficient in foreign languages will be much sought after as enterprises seek to penetrate the lucrative European markets. A knowledge of computers will be necessary in all sectors of the economy.

Of course, there will continue to be a demand for a wide range of specific vocational skills. But there will be a core group of transferable skills which will be required by all sectors of the economy. Consequently, students who possess one or more of these core skills will be much more employable than those who have pursued the traditional route of specialising in a vocational skill from an early age.

2.6 Key Issues

The structure of the economy in FRM is undergoing fundamental change. When this process is completed, the economy may exhibit the following features which will distinguish it from the structure which existed before independence;

- an increasing proportion of exports will go to other market economies in Europe.
- Companies will have their own marketing and finance functions and will be responsible for the formulation and implementation of their own strategic plans.
- there will be extensive use of computerisation and electronic-based equipment throughout industry.
- Employment in the manufacturing sector will have declined and will have expanded in the services sector.
- The average employment size of enterprises will have declined.
- Enterprises will have a shorter life-span

These changes in the structure of the economy will give rise to corresponding changes in the skills hierarchy. Specifically, there will be a group of core skills which will be

much sought after by many different sectors of the economy. The challenge facing the VET system, and indeed the education system as a whole, is to progressively reduce the proportion of resources in the system which are allocated to the acquisition of specialised vocational skills, and expand the level of resources devoted to the teaching of transferable core skills.

Chapter 3: Labour Market Situation

3.1 Introduction

Much of the information in this chapter has been developed through a detailed analysis of the Labour Force Survey which was carried out for the first time in FRM in the week of 29th. April to the 8th. May 1996.

In general, the survey methodology followed closely the standards recommended by the International Labour Organisation (ILO) and which are followed by most European countries. However, some additional questions were included to reflect the unique aspects of the labour market in FRM and there are also some differences in the definitions of industrial and occupational categories.

3.2 The Labour Force

In FRM, the Labour Force is made up of those who are between 15 and 80 years of age and who are either working or who are looking for work. This amounts to 780,419 people out of a total population in these age-groups of 1,417,741 - equivalent to an activity rate of 55%. Of these, 533,441 (68%) are employed and 246,978 (32%) are unemployed and looking for work.

Although attendance at school in FRM is compulsory up to 15 years of age, only 24% of those aged between 15 and 19 years are in the labour force, reflecting the high level of progression from elementary to secondary education (see chapter 4). The situation is very different, however, in the post-secondary age group of 20-24 years with 65% of this age group in the labour force.

There are 306451 females in the labour force which represents a participation rate of 43% - quite high in comparison to a number of European countries. The male participation rate on the other hand is relatively low at 67%.

3.3 The Structure of Employment

There are 533,441 people employed in FRM of which 37% are employed in industry (including construction and public utilities), 19% in agriculture (including forestry and water management), and 44% in the services sector and public administration. The numbers employed in both industry and agriculture is quite high by the standards of West European economies and this suggests that employment in both sectors will decline relative to the service sector as the market economy develops in FRM.

Table 3.1
Company Ownership by Broad Industrial Sector

OWNERSHIP	INDUSTRY, MINES	AGRICULTURE	SERVICES	TOTAL
Public	47%	17%	39%	37%
Private	21%	71%	33%	36%
Mixed	32%	9%	29%	26%
Other	0	3%	0	1%
Total	100%	100%	100%	100%

Source: 1996 Labour Force Survey

The success of the privatisation process described in chapter 2 is reflected in the fact that 36% of the workforce in FRM work in private enterprises - roughly the same proportion as the number who are employed in public-owned enterprises and public administration.

Of those in work, employees constitute 79% while employers make up 3%. There has been a significant expansion in the numbers who are self employed over recent years and this group now represent 11% of the workforce - about 60,000 people. These companies are prevalent in particular in the retail trade, the financial services sector and personal services. A further 7% of the workforce are unpaid family workers, mainly working in agriculture

Table 3.2
Employment by Occupation

OCCUPATIONAL GROUP	PERCENTAGE
Industry, Miners and Related Workers	32%
Agriculture and Related Workers	18%
Professionals and Artists	15%
Administrators and Related Workers	14%
Trade Workers	11%
Service Workers	7%
Officials and Managers	4%

Source: 1996 Labour Force Survey

Occupations in manufacturing and construction still provide employment opportunities for about a third of the workforce in FRM. Employment in these sectors has declined dramatically in recent years and this trend is expected to continue.

3.4 The Structure of Unemployment

There are a total of 246,978 people unemployed in FRM which represents an unemployment rate of 32%. Of these, 136,579 are males and 110,399 are females - an unemployment rate of 29% for men and 36% for women respectively.

There are three features of the high unemployment rate in FRM which are of particular concern. Firstly, high unemployment is not confined to those with low qualifications - on the contrary, the rate of unemployment among those with secondary education is equivalent to the national average. Secondly, unemployment impacts disproportionately on the young. Thirdly, unemployment is typically of very long duration.

Table 3.3
Unemployment Rate by Highest Level of Education

EDUCATION LEVEL	MALE	FEMALE	TOTAL
Without School	35%	51%	42%
Uncompleted Primary	29%	35%	31%
Primary Education	38%	44%	40%
Secondary (3 years)	31%	41%	34%
Secondary (4 years)	24%	34%	29%
Higher (Non-university)	13%	20%	16%
University	13%	18%	15%
Total	29%	36%	32%

Source: 1996 Labour Force Survey

The rate of unemployment by highest level of educational attainment is shown in table 3.3 above. With the exception of those who have not completed their primary education[3], the level of unemployment declines as educational attainment increases. This is the pattern in many European countries. However, the decline in unemployment in some cases is not very significant. This is particularly so in respect of those who have completed 3 year secondary schools where the unemployment rate is only 6% lower than those who have completed primary education only. However, the unemployment rate is not much lower than the national average even among those who have 4 year secondary education. Over 75% of the courses on the four year programme are also vocational courses and such high unemployment among students with second-level vocational qualifications suggests that many of the VET courses are not relevant to the needs of the labour market.

This would appear to be the opinion of many parents and students. There has been a dramatic reduction in enrolment in the vocational secondary schools in recent years and this decline has been most marked in the 1-3 year vocational courses where enrolment has declined by 30% between 1991 and 1994 (i.e. 22,687 to 15,781). At the same time, there has been large increase in the demand for gymnasium education[4] .

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[3] This may be due to a sampling error as the absolute figures in both the 'unqualified' and 'not completed' categories are relatively small.

[4] See for example, Cohen M. and Mace John, 'Report of the UNESCO/UNDP fact finding mission on Public Expenditure on Education in the former Republic of Macedonia', UNESCO Division of Policy and Sector Analysis, 21st June 1995.

The second aspect of the figures in table 3.3 which is worthy of note is that the higher unemployment rate among women is distributed more or less evenly throughout the different levels of education. The gender differential does not appear to be particularly influenced by type of education. Thus the rate of female unemployment is 10% higher than male unemployment in both those who have 3 year and 4 year secondary education.

Table 3.4
Unemployment by Age

Age-Cohort	Unemp. Rate
15-19	77%
20-24	66%
29-49	27%
50+	9%
Total	32%

Source: 1996 Labour Force Survey

Although the figures in table 3.3 suggest that higher and university level education does significantly enhance employment prospects with unemployment rates among this group only half the national average, the age-related analysis above, indicates that this may no longer be the case.

One of the characteristics of the structure of unemployment in FRM which gives rise to concern is the disproportionate impact unemployment has on young school-leavers. This is shown clearly in Table 3.4 above. The figures show that most of those who left the education system in the last few years are unemployed. Moreover when these figures are combined with those in table 3.5 below, it would seem that many of them never had a job since entering the labour force. The figures show that a very high proportion of this age-group have been unemployed for over three years (i.e. since leaving school). The experience of their older colleagues in the 20-24 year age-group - where the average duration of unemployment is increasing - suggests that there is no reprieve in sight.

Table 3.5
Unemployment by Age and Duration.

Age-cohort	< 6 Months	>6 < 12 Months	> 1 < 4Years	> 4 years
15-19	17%	32%	43%	7%
20-24	7%	9%	50%	33%
25-49	7%	5%	29%	58%
50+	12%	14%	36%	37%
Total	8%	11%	36%	45%

Source: 1996 Labour Force Survey

These figures reveal an alarming picture of chronic unemployment among the young in FRM. It is a situation which must be addressed with the greatest urgency. The proposals outlined in this report in respect of enhancing the relevance of the educational system should result in time in an improvement in the employment prospects of school-leavers. But improvements in the education system must be accompanied by significant growth in the economy to have any real impact on youth unemployment.

Unfortunately, the economy is unlikely to grow by more than 3% in 1997 and this is not sufficient to provide employment for significant numbers of school-leavers. In these circumstances, the Government should consider the introduction of some form of temporary public employment programme specifically targeted at school-leavers. This is not an issue which is directly relevant to a reform of the VET and, consequently, it is not included in the recommendations of this report. However, it is most undesirable from an economic and social perspective to allow such large numbers of school-leavers to drift into long-term unemployment.

Table 3.6
Unemployment by Ethnic Nationality

NATIONALITY	MALES	FEMALES	TOTAL
Macedonian	21%	32%	26%
Albanian	52%	69%	55%
Romany	63%	86%	72%
Turks	52%	47%	50%
Serbs	29%	31%	29%
Other	41%	37%	47%
Total	29%	36%	32%

Source: 1996 Labour Force Survey

A comparison of the unemployment rates among the different ethnic nationalities is shown in table 3.6 above. The figures reveal that unemployment among ethnic Macedonians is 26% compared to a national average of 32%. However, with the exception of ethnic Serbs, there is chronic unemployment among the ethnic minority communities and over half of all the 100,000 Albanians and the 20,000 Turks in the labour force are unemployed.

3.5 Labour Market Information.

The key providers of labour market information in FRM are the Statistics Office of FRM and the Employment Bureau. The Statistics Office is responsible for the collection and analysis of statistics on population and demography, labour market statistics and statistics on the education system.

The Statistics Office use a number of different techniques to collect this data. With regard to population and demography, a census is undertaken every 10 years, However, due to political difficulties, the Census of 1991 was not fully completed and another census was undertaken in 1994. The results of this Census are currently being analysed and it is expected that comprehensive data will be available soon.

The Statistics Office also undertake a monthly survey of wages and employment and a more detailed survey every 6 months. It also undertakes household Budget Surveys - the most recent in October 1996 and the results will be available in early 1997.

In the context of the labour market, it is the Labour Force Survey which provides the most useful information. Its use is limited however, by the fact that it is the first such survey and consequently it is not possible to derive time-trends on the basis of the data. It is unfortunate however that questions on employee training, which are normally included in the European Labour Force Survey, were not included as the data would have provided an accurate indication of the present level of industrial training in FRM.

The Labour Force Survey, however, does not provide information on skill needs and this data is critical in the context of enhancing the relevance of the VET system. The Labour Force Survey contains statistics on employment by occupation, but these are not sufficiently desegregated to be of assistance in the identification of skills and in the absence of time-trends, it is not possible to identify which occupations are expanding and which are contracting.

Vacancy data provides a more useful barometer of skill requirements and this data is collected by the Employment Bureau which has a network of local offices in every Municipality in FRM. The principle responsibilities of the Employment Bureau is the payment of unemployment benefit, the registration of job-seekers and vacancies and the operation of a number of labour market interventions (see chapter 4). As employers are legally obliged to notify all vacancies to their local employment office, the Employment Bureau should have statistics on all vacancies which have occurred in the economy over a specific period.

However, while vacancy data is undoubtedly an important indicator of skill needs, it is not sufficient for a number of reasons. The job specification provided by employers to the employment office is not comprehensive. Furthermore, vacancy notifications do not provide an indicator of future skill needs and, despite the legal obligation, it is

not certain that all vacancies are notified to the employment offices. It is understood that the local labour offices are in the process of developing a system of short labour surveys but a national approach to the collection of information on future training needs is required and should be sustained on a long-term basis.

For these reasons, one of the recommendations of this report is that a comprehensive training needs survey, using key informants, should be undertaken by the Statistics Office and/or the MOL. The methodology should allow for some long-term projections of skills needs in the economy and should link in with the activities of the Ministry of Development in this regard.

3.6 Key Issues

- Unemployment in FRM - at 32% of the labour force - is very high by European standards.
- Unemployment is chronic in the sense that the mean duration of unemployment is 3 years and increasing .
- Unemployment is higher among women than men at all educational levels.
- Unemployment is higher among the minority ethnic community than among ethnic Macedonians.
- Unemployment impacts disproportionately on young people.
- The vast majority of school-leavers are unemployed and have been unemployed since leaving school.
- Comprehensive data on the future national skill needs of industry is not available from the labour market information systems.

Chapter 4: The Structure of Education

4.1 Introduction

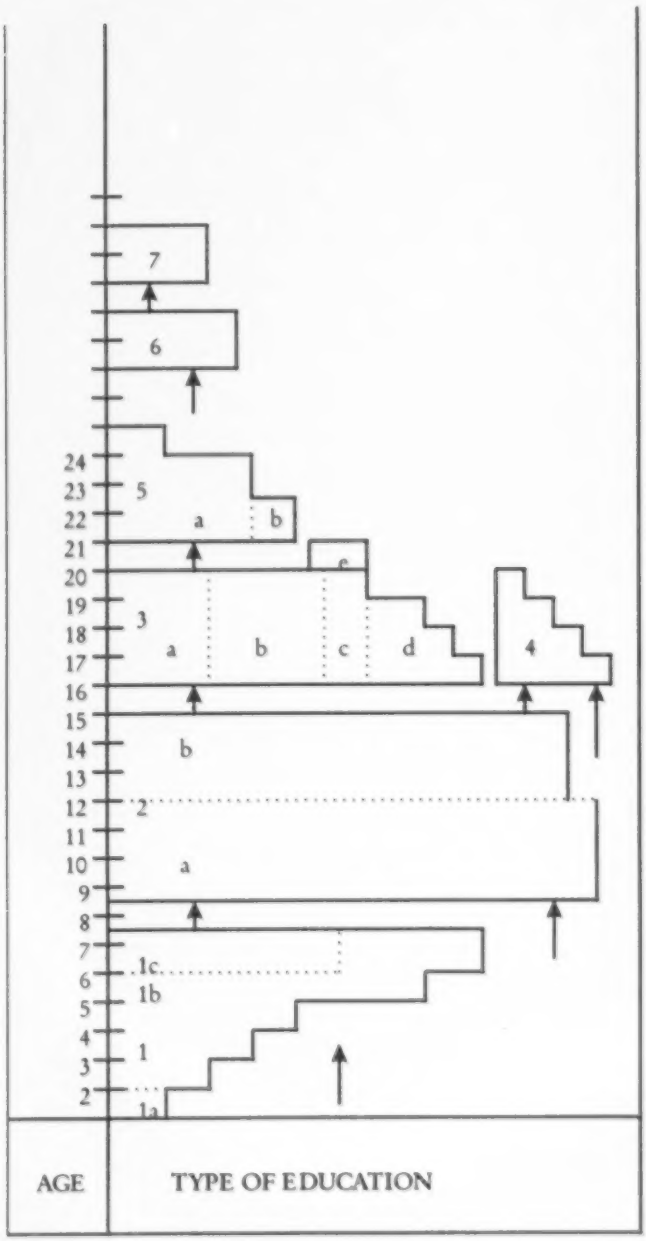
The education system in FRM consists of four principle cycles; the pre-school cycle; the primary or elementary school cycle, the secondary school cycle and the third level cycle. There are further variations, both horizontally and vertically, within each of these cycles. For example, the pre-school stage consists of Nurseries, Kindergartens and Infant schools, while the secondary school cycle includes both general education (i.e. Gymnasium) and vocational or professional education. There are also two types of third-level education, a two year college programme which provides further specialisation in an area of vocational education and a four year university degree programme of a more academic nature (see fig 4.1 below).

The school curricula in FRM reflects the multi-ethnic nature of the population in that each of the principle minority nationalities, Albanians, Turks, Gypsies and Serbs are legally entitled to receive instruction in their mother tongue at all levels of education. This legal provision can give rise to certain practical difficulties for the schools in respect of the allocation of teachers and classrooms. However, it is considered that a multi-ethnic educational policy helps to foster a greater sense of social cohesion and this is an extremely important consideration in the context of creating a politically stable democracy.

The current structure of education in FRM is in the process of change. This change is required so that the education and training of the students more closely reflect the needs of the emerging market economy. Proposals in respect of some aspects of this change have already been formulated and submitted to the Government by the relevant authorities. For example, the PIM have submitted proposals in respect of occupational groups and curricula design while the Chamber of Commerce has submitted proposals on enhancing the role of business in the design and delivery of vocational training and for the reintroduction of a type of dual-apprenticeship system.

Figure 4.1

Structure of the Educational System of the Republic of Macedonia



7. DOCTORATE OF SCIENCES

6. POST-GRADUATE STUDIES
(Master's degree and specialisation

5. HIGHER LEVEL EDUCATION
a. Faculties and institutes
b. Two-year colleges

4. EDUCATION OF ADULTS
(Elementary and Secondary for different occupations)

3. SECONDARY EDUCATION
a. High school education
b. Four-year vocational for different occupations
c. Art school
d. Other vocational with programmes of shorter duration
e. Specialisation

2. ELEMENTARY EDUCATION
a. Classroom teaching
b. Subject teaching

1. PRE-SCHOOL EDUCATION
1.a. Nurseries
1.b. Kindergarten
1.c. Infant-schools

Source: Programme Structure of Secondary Education PIM 1996

4.2 Pre-School Education

The pre-school education system in FRM consists of nurseries, kindergartens and infant schools. It caters for children between the ages of 1 and 7 years.

Pre-school education is not compulsory in FRM. However, approximately 35,500 children attend these schools which is roughly equivalent to 16% of the population in the relevant age-cohorts. There are approximately 4,100 staff and the teacher/pupil ratio is 1:19.

There has been a dramatic decline in the numbers attending both nursery and kindergarten schools in recent years. This may reflect the general decline in the economy. As unemployment among parents increases, there is less need to send young children to school. Furthermore, while most of the costs associated with pre-school education are funded by the Ministry of Labour and Social Policy, the parents must pay for certain items such as meals and these costs may be a significant factor in a situation of declining incomes.

The curriculum in the pre-school cycle is developed by the PIM and follow the same procedures as elementary education outlined below.

4.3 Elementary Education

Education in FRM is compulsory for the eight years which comprise the primary or elementary school cycle - which covers the ages of 8 and 15 years. The eight year school cycle is divided into two sections - grades i to iv for classroom teaching and grades v to viii for subject teaching.

There are approximately 1050 elementary schools and 260,000 pupils in FRM which is roughly equivalent to 90% of the population in the relevant age-cohorts. The teacher/pupil ratio is 1: 19.

The PIM is responsible for the formulation of curricula for the elementary school system and is currently engaged in reforming the current curriculum which dates back to 1980. The focus of these reforms is on the methodology of teaching practice and specifically, on moving away from a passive approach to education in which the primary emphasis was on the assimilation and regurgitation of factual data to a more interactive, child-centred methodology. In this task, the institute has been greatly assisted by its partnership with Bishop Grosseteste College in the UK and by initiatives undertaken by SOROS - particularly the Step-by-Step programme.

4.4 Secondary Education

There are 92 secondary schools with approximately 72,000 pupils in FRM These schools cater for pupils between 15 to 19 years of age. Although attendance at a secondary school is not compulsory in FRM, each pupil has the legal right to such an education and approximately 80% of those who leave elementary education enrol in the second-level system.

The 92 secondary schools are divided between gymnasium and vocational schools. There are 11 schools which provide only gymnasium education while the remainder are either vocational (56) of a mixture of vocational and gymnasium in the same building (25).

4.4.1 Secondary Education - Gymnasium

Gymnasium school education lasts four years. The curriculum offers three distinct courses, General Education, Natural Sciences and Mathematics, and Languages. All three courses provide equal access to higher education.

The curriculum provides common general educational subjects on all three courses such as foreign languages, history, mathematics etceteras. However, the optional subjects which the curriculum offers in the fourth year differ depending on the particular courses. An example of the present curricula in the general sciences and mathematics high schools is shown in Annex 2.

The gymnasium system of education was only reintroduced in 1991 and the curriculum therefore is of relatively recent origin. Currently, up to 75% of the timetable is spent on a common academic programme with the remainder made up of elective programmes. A striking aspect of the curriculum is the range of subjects which are provided in the core curriculum. This can include up to 15 compulsory subjects in addition to Physical Education and Defence and a further range of optional courses - a quite extensive syllabus when compared to the second level academic curricula in many European countries.

The PIM is currently reviewing the curriculum in both the gymnasia and the vocational schools. With regard to the curriculum in the former, there is general agreement that there should be a reduction in the number of compulsory subjects but there has been no consensus as yet on which subjects should be taken out of the core curricula. (see Annex 3, for the proposed curriculum)

In comparison to the corresponding situation in other European countries, the general education curriculum in FRM allocates considerably more resources to the teaching of social sciences such as sociology, philosophy and logic - and to a lesser extent, music and art. There is considerable scope for reducing the amount of

instruction in these areas. The social sciences, for example, could be replaced by a single subject, Civics.

In addition, some subjects in the core curricula, such as Latin, Art and Music could be reclassified as optional subjects, while it should not be necessary for every student to take Biology, Chemistry and Physics.

In general, the reclassification of core-subjects into optional subjects would reduce the number of compulsory subjects while it would also allow more resources to be devoted to the teaching of those skills and competencies which will be most in demand by enterprises as the market economy develops such as information technology and foreign languages. Some of these ideas are incorporated in the proposed new curriculum-Annex 3.

4.4.2 Secondary Education - Vocational

Curriculum

The vocational secondary schools provide education in a wide range of technical skills in addition to a general education. These skills are classified under 26 occupational clusters which in turn give rise to 183 different educational profiles. An occupational cluster is a group of occupations which share a common vocational educational core curriculum. For example, the health occupational cluster contains 7 educational profiles all of whom share a common vocational educational curriculum which is made up of Latin, Anatomy and Physiology, Hygiene with Health Education, Medical Psychology and Microbiology (see Annex 4).

Each educational profile, however, also contains a special vocational curriculum which is unique to that profile. Thus for example, the occupation of dental nurse which is part of the Health occupational cluster, has an educational profile which contains both a common vocational core curriculum and a special vocational core curriculum.

In addition, however, to a range of common and special vocational subjects, the curriculum in the vocational secondary schools also provides teaching in general educational subjects. The amount of instruction on these general educational subjects is, of necessity, lower than in the gymnasium. Furthermore, the composition of the general education part of the curriculum also varies to some extent between the occupational clusters. Thus for example, there is considerably greater time spent on the teaching of Mathematics and Physics in the Electrical-Technical occupational clusters than in the Health occupational cluster while the reverse is the case for Chemistry and Biology (see Annex 4+5).

The curriculum in the vocational courses also includes an element of practical training. The duration of the practical training varies considerably between different

vocational courses although it can be surprisingly short for some of the more industry-orientated courses such as the Electrical and Technical professions. The significant decline in the industrial base in FRM in recent years may have made it more difficult to secure substantial on-the-job placement for students studying craft-related skills.

With regard to the duration of vocational courses, the 183 educational profiles are made up of 79 four year courses and 91 three year courses (Annex 1). In addition, there are 13 specific skill courses that are less than 3 years in duration. Some vocational schools offer a 5th year to students who wish to further specialise in their profession, but this option is not availed of to any great extent.

The final examination in the vocational secondary school system consists of a written examination in the mother-tongue language and literature and a practical examination in their chosen profession.

The Laws on pre-school, elementary and secondary education stipulate that the Ministry of Education is responsible for the curriculum and the assessment of pupils. The actual work of designing and delivering curricula and of assessing student achievement is the responsibility of the PIM, an agency of the MOE, whose work is subject to approval by the Pedagogical Council which in turn is adopted by the MOE.

The PIM has a staff of 200 distributed between its main office in Skopje and 10 district offices. In addition to its responsibilities in respect of curriculum and assessment, it is also responsible for in-service training of teachers and for educational research. As a result of the 1995 laws on elementary and secondary education, its remit has been extended to include the administration of a new teacher appraisal system and the new national examination ('the matura').

This amounts to a very extensive range of responsibilities for one institute particularly in view of the fact that there is widespread agreement in FRM that the current curricula in the secondary school system requires extensive revision and rationalisation. The PIM itself estimates that 150 curricula need rewriting. It has already begun this process by submitting proposals on reducing the large number of occupational clusters and educational profiles in the curriculum of the vocational schools. However, as yet there has been relatively little work done on writing new curricula for the proposed new occupational clusters and the PIM itself is of the view that it requires substantial additional resources and external expertise to complete this task within a reasonable time-scale.

One method of enhancing the resources at the disposal of the PIM is to transfer the responsibility for both the in-service training of teachers and student assessment to other organisations. The former proposal is anticipated in the Education Law.

If there were a reduction of the responsibilities of the PIM of this magnitude and if, in addition, the PIM were offered the assistance of European curriculum experts, there would be a real possibility that the PIM could accomplish the critically important task of revising and updating the curriculum in the second level system within a reasonable time period.

However, while it is essential to increase the level of resources and expertise available to the PIM, these measures are not sufficient to ensure the success of the reform process. In particular, the new curriculum must be relevant to the needs of industry. It is notable in this regard that the rationalisation of vocational courses proposed by the PIM and accepted by the Ministry in October 1996 (Annex 1,6+7), were not informed to any significant extent by an analysis of the skill needs of the economy.

Some measures which are required to ensure the relevance of the new vocational curricula to the economy are as follows: The Statistics Office and/or the MOL, should undertake periodic national surveys of the skills needs of the labour market (see chapter 3). Employers from the relevant sectors of industry must be formally and adequately represented on all groups involved in the design of curricula including the National Pedagogical Council and the 25 Working Groups which have been recently set up to design new curricula for the different occupational clusters. If necessary, representation for employers on these groups should be implemented at the expense of a reduced representation from teachers.

School Management and resource utilisation

There is, as stated above, a mismatch between supply and demand for VET. It would seem appropriate to reach a situation where a leaner better-focused VET system can respond to the changes in FRM society. Management of Vocational School resources is at present a mixture of over and under-utilisation i.e. although most schools operate a dual shift system (partly due to the need for separate instruction in Albanian) during the teaching day where 2 separate groups of students and teachers use the school resources, it is evident in some schools that timetabling leaves classrooms or workshops empty. This points to the need for a critical look at school management and resource usage.

The Principle of the Electro- Mechanical school in Bitola has recognised the need for a critical review of school management and assisted by funding from the Soros Foundation, has launched a training programme focused on the need to encourage and accept change and develop leadership roles using 3 schools as pilots.

Teacher resource usage needs to be critically reviewed in the context of an average pupil teacher ratio of 16/1 in Vocational Schools which should be increased. It is recognised that there is a surplus of teachers in Vocational schools (see 4.9, below). A comprehensive review is required to look at teacher allocation per subject, ratio of support staff and redeployment of teachers in the context of VET restructuring.

School mapping

Enrolments in narrowly specialised Vocational Schools are declining in line with an increased demand for more general and comprehensive education. A secondary school mapping exercise was carried out in 1994 but a more detailed and up to date survey is an urgent priority. This would critically assess perceived over-provision, overlap, school location, catchment areas, equipment and resources in the context of changing demands from industry, students, parents and the reallocation/renewal of resources, equipment and buildings which will be required in a rationalised and reformed VET system.

Assessment

Assessment of students takes place during the school year both in school and at the practical work location. A final exam is set by each school at the end of 3-4 years VET. The new legislation will introduce the Matura Examination, mainly focused on Gymnasium. Certification of Continuing VET takes place at the particular Institution providing the training. The PIM also has an input into the setting of certification and standards in secondary VET schools.

However there is no unified VET Certification system which objectively measures achievement to a national standard. There is an urgent need to establish a national certification system administered by an independent national body which will allow indigenous and EU employers and institutions to verify qualifications and attainments of students/workers leaving the VET system.

Teacher training

Teachers of secondary VET schools are trained in the Faculties if they are general or vocational/theoretical teachers over a 4 year period. However it is reported that the pedagogical elements in their education may not be sufficient. The new legislation specifies that new teachers will have to take an examination in teaching skills at the end of their 1st year teaching. This proposal will be implemented by the PIM and the MOE.

Practical subject teachers are typically 4yr VET graduates who undergo a further 1yr. training in pedagogics and teaching technology on a part-time basis.

In the past the training led to a passive, teacher led classroom style and there is an urgent need to introduce a more learner based interdisciplinary approach to teaching and with an emphasis on teacher teamwork and new teaching/training technology.

Equipment

Equipment is generally outdated, the exception being those schools which have actively engaged in successful production activities. There is an urgent need to re-equip schools and continuing VET institutions on an equitable basis unrelated to their production capacities. As modern equipment is a prerequisite for a reformed curriculum this is a key issue which needs addressing in relation to the rational funding of Education and Training.

Vocational Guidance

This is done on an ad-hoc unstructured basis by school principals and pedagogues etc.

There is no national training system for professionals in this field. A good Career Guidance system is a prerequisite for the effective utilisation of human resources in FRM. Great wastage of human resources is likely if students enter occupations for which they are not suited and for which they have no interest or aptitudes.

An urgent intervention is required in this area if supply is to be accurately matched with human resources demand particularly in a transitional economy. This applies equally to the unemployed job-changers and students. The development of in-service and post graduate training in career guidance and counselling is an urgent priority for a fully integrated VET system. The output from such training will be required urgently in schools and labour market institutions such as The National Employment Service.

4.5 Third-Level Education

The higher education system in FRM covers two year studies at the colleges and between 4 and 6 year studies at the two Universities, 'St. Cyril and Methodius' in Skopje and 'St Clement of Ohrid' in Bitola.

Approximately 27% of those who complete second-level education enrol in higher education. All students who have completed the four year second level education - either at a gymnasia or a vocational schools - are entitled to enrol on both part-time and full-time courses. However, the demand for places in third-level education far exceeds the supply and places are allocated on the basis of grades obtained in the secondary school and results obtained at an entrance examination. A quota system is also in operation which ensures that at least 10% of third-level students are members of the minority ethic communities.

The design of curricula for higher education is the responsibility of the 2 universities and its colleges and faculties. A list of the faculties in the two Universities is shown in Annex 8. A major omission is the absence of any Faculty of Management, however the Faculty of Economics provide some management courses.

In theory, students who have completed their second level education may attend a two year programme at a college in order to further specialise in their chosen field. However, the college system is as yet very underdeveloped and currently only two such colleges exist in FRM. Some faculties at the Universities, however, do issue diplomas for two-year study programmes.

4.6 Training of Adults

The Ministry of Education, under the 1995 Education Law, will have responsibility for Workers Universities (WU) which are a significant provider of Adult Education and Training in FRM. These institutions were originally set up by Trade Unions in the old system and were sidelined in the reforms of the 1980's. As a result they were required to develop as quasi-private bodies and provide their own funding by selling education and training services. The WU in Skopje has survived and developed to the extent that it is now a significant provider of language, computer and some specific skills training both for the employed and unemployed workforce. There is good scope to re-equip and support curriculum development in the WU in order to develop continuing VET which is generally weak in FRM. The MOE propose to enhance adult training provision in the VET schools and require assistance to develop specialised curricula and instructor training in that regard. However the development of Adult Training requires an approach which does not easily fit into VET schools and should be addressed separately from the initial VET system.

The Ministry of Labour and Social Policy(MOL) has proposed a new Labour Law, articles 45-57 of which regulate provision of career guidance and vocational training. The present situation is that the MOL through the Local Labour Offices provided training for only 400 people in 1996 and only does so in response to specific requests from employers for staff trained in a particular skill. The MOL then funds such training for the unemployed adults. There is no policy to train unemployed with a view to generally re-skilling them in order to improve their employability other than some motivational training in pilot job-clubs.

The World bank, through the Privatisation Agency, has funded out-placement training for workers about to be made redundant. This includes help with small business development and specific skills training.

Some industries provide training for their own staff but this activity is reported as minimal due to the general recession in FRM. Some secondary schools provide training for workers about to be made redundant such as in Prilep where a local industry paid for a 6 month upholstery training course. But this is the exception rather than the rule.

The development of a new initiative in this general area such as the establishment of a Training Fund to develop the capacities of present and future training providers should be a priority. This would develop, inter alia, a training capacity to meet the needs of continuing training and management training both in the private and public sectors.

4.7 Management Training

The chamber of Commerce have provided some management training seminars for members using donor aid and some of their own funds. They would like to establish a management training school but do not have the resources at present. The Faculty of Economics has also organised some management training seminars for industry and provides degree courses in business and management. The Macedonian Business Resource Centre (funded by USAID) provide some management training. The Tempus programme will also support, inter alia, projects to develop qualified personnel for management through higher and continuous education. The Institute Of Sociology have instituted an MBA course but apparently it is not well supported.

However a well focused management retraining provision has yet to be established in FRM. The Privatisation Agency has some plans in this regard and may participate in the integrated SME development Programme about to be launched using Phare funding.

The numbers of people who have undergone management training is difficult to establish but the Chamber of Commerce reckon that less than 1000 people participated in management training in 1996 and this training was mainly of 2-3 days duration on average.

4.8 The Administrative Framework

The Ministry of Education (MOE) is responsible for the administration of the education system in FRM. It has 6 departments, Pre-school and Elementary, Secondary, Higher Education, Sports, Economics and Social affairs and International Co-operation and a current staff compliment of approximately 75. There are also 35 local offices attached to the Ministry with a staff of about 190 but decisions in relation to finance and policy are determined by the Ministry.

At the school level, the School Board is the supreme management authority of each school. It consists of representatives of parents, teachers local communities and

institutions and, in the case of secondary schools, students. The School Board is responsible for establishing the work programme, electing school principals, the recruitment of teachers and the expenditure of the budget within the parameters laid down by the Ministry.

The principal of the school is appointed by the Ministry on the advice of the School Board and the PIM for a 5 year term of office in secondary schools and 4 years in elementary. At the end of theses periods they must be re-appointed.

Teachers Councils operate in the schools below School-Board level. These are composed of the teachers themselves, professional teacher bodies and students.

The administration of the VET system in FRM is characterised by centralised decision-making in respect of issues such as the determination of the budget and the allocation of staff and some limited local school autonomy in respect of day-to-day operational decisions.

4.9 Financing of Education.

Virtually all of the education system in FRM is financed through the education budget which is the responsibility of the Ministry of Education. The exception being the pre-schools which are funded primarily through the budget of the Ministry of Labour and Social Policy which covers salaries, maintenance and investment. Parents are expected to contribute to the cost of meals although the unemployed, student parents and parents of low income are exempt from this obligation.

The total value of the education budget in 1996 is estimated at 8,621,000,000 denars or $200 million which represents roughly 18% of the National Budget and is similar to its allocation in 1995. It is estimated that the 1997 budget will also be of this magnitude - a reduction in real terms of about 3%.

The distribution of the budget is shown in the table below. By far the largest allocation is for the primary schools which reflect the distribution of the student population.

Percentage Distribution of the Education Budget in 1995
(Total Expenditure = 8,621,466 denars)

Category	Primary Schools	Secondary Schools	Higher Education	Ministry, PIM	Total
Personnel	48.8	18.8	10.2	2.2	80.1
Materials/Services	4.4	1.8	2.1	0.2	8.6
Current Spending	1.2	0.3	0.2	0.7	2.4
Transfers	1.5	0.5	3.6	0.1	5.9
Capital	1.5	0.9	0.6	0	3.0
Total	57.4	22.4	16.8	3.4	100

Source: UNDP Report, July 1996

Approximately 80% of the education budget - representing 6.9 million denars - is absorbed by the salaries of teachers and non-teaching staff. The average official teachers salary is 10,250 denars or $250 dollars a month. Although this represents the average salary in FRM, it is not sufficient to sustain a good standard of living. Consequently, there is a considerable problem of low morale among teachers.

This problem is alleviated in some secondary schools by significantly augmenting the salary of teachers - in one case by as much as 30%. The payment of these additional allowances come from a combination of contributions from parents and, in particular, the commercial activities of many vocational schools.

The Ministry of Education encourages vocational schools to utilise the facilities of the school and the skills of the students to earn income and any income so earned is additional to their normal budgetary allocation. The expenditure of this income, however, must be approved in advance by the Ministry.

Production provided by vocational schools range from driving instruction to the sale of metal and wood products, plants and processed foods and wines - all of which have been manufactured or processed by the students themselves. Approximately $ 20m. - almost equivalent to 10% of the total education budget - is earned in this way.

It is understandable that the Ministry for Education should support and encourage this activity. The budgetary situation is extremely difficult. In addition to the problem of teachers pay, the 1.8% allocation for materials for the secondary schools - an average of 1726 denars or $42 for each of the 92 schools - is grossly inadequate, particularly for the vocational schools where the purchase of modern equipment is essential for effective practical instruction. Most of the income earned is spent on the purchase of modern equipment and materials.

This policy however, does mean that some municipalities which are fortunate to possess school managers who have a high degree of entrepreneurial flair, are in a position to earn relatively large amounts of income for equipment purchase, while other municipalities must make do with equipment which is out-of-date. For example, in one particular region, the school management has recently bought a simulated computer numerically controlled machine for teaching students, while in an adjacent region, the students are learning on manually operated machines. This difference in the level of resources between similar vocational schools in different municipalities must be taken into account in the rationalisation of the VET system. The undue emphasis on production is also undesirable in an educational context.

The personnel budget of the secondary schools (1,625,081 denars) also includes the payment of non-teaching staff. The ratio of non-teaching to teaching staff in FRM is relatively high by European standards. To some extent this reflects the distribution of the student population in FRM and in particular, the relatively low density in the more remote areas of the West where it is difficult to fill some schools. However, it also reflects the practical difficulties of providing teaching to the ethnic nationalities in their mother tongue.

The implementation of the legal requirement to provide instruction in the mother-tongue of the ethnic nationalities, combined with the large disparity in regional population densities, makes it virtually impossible to achieve optimum levels of efficiency in any aspect of the administration of the VET system. For example, the pupil/teacher ratio in the second-level schools is relatively low by European standards at 16:1. But it is not uncommon to find classes of 30+ in some urban secondary schools where the language of instruction is Macedonian. The average pupil/teacher ratio is secondary schools where the language of instruction is Albanian is 14.3:1 and it is only 7.7:1 in Turkish secondary schools.

Similarly, the structure of the school day, which is divided into a morning and afternoon shift, is critically determined by the requirement to teach the same subjects in two or more languages. Thus classrooms must be made available at least twice a day to teach the same subjects to the same grades although classroom space may not be fully utilised.

It is appreciated that it is most important to promote political stability and racial harmony. However, this policy does limit the extent to which the efficiency of the VET administrative system can be improved. Furthermore, the unemployment figures in chapter 3 above suggest that the practice of providing separate education for the ethnic minority communities may not impact directly on their employment prospects but in the longer term this situation may improve.

4.10 Research

The PIM, the FRM Academy of Sciences and the Faculties carry out Educational Research but the particular needs of a fully integrated VET system requires a singular approach. These needs have been met in many other countries through the establishment of an Institute of Vocational Education and Training which represents all the VET interests and is responsible inter-alia for VET research (this is the approach taken in Slovenia). The establishment of such an Institute is an issue in the FRM VET environment. In the interim a National VET Observatory will be established supported by the European Training Foundation.

4.11 Key Issues

- There is a centralised system of education administration in FRM and decisions in respect of budgets, staff and curriculum design are made by the Ministry for Education and the PIM with relatively little local autonomy for schools.
- The responsibilities of the PIM are too extensive and varied in respect of the resources at its disposal.
- Industry is generally not represented on any of the decision-making bodies including the National Pedagogical Council, the School-Boards and the Teachers Councils.
- The financial resources available to many vocational schools, particularly in respect of equipment, is very limited and the equipment is often significantly out-of-date.
- The legal obligation to provide separate education in their mother tongue to the ethnic minority communities makes it very difficult to significantly improve the efficiency of the administration of the education system.
- The limited amount of general education received by most second-level students means that they are poorly equipped to secure employment other than in their area of specialisation.
- There is insufficient information on the training needs of the economy.
- National Certification and Standards systems need to be developed.
- The budget for In-service training of VET teachers is insufficient.
- There is no provision for the training of vocational guidance professionals.
- There is a mismatch between supply and demand for VET.
- The Post-secondary level is very under-developed reflecting the general fall-off in demand for vocational education. Consequently, there are virtually no State

facilities for the upgrading of skills or for students from the second-level vocational schools who wish to undertake further specialisation in their profession, other than the 5th year specialisation option which the MOE propose to expand.

- Both the State and the private sector provide some adult retraining but to a very limited extent and there is no integrated national strategy to develop such training.
- There are no specific Management Training Institutes either attached to the Universities or Third-Level colleges or Chambers of Commerce or other relevant Bodies.

Chapter Five: Case Studies

5.1 Case Study 1 - Visits to Schools in Kavadarci

This case study describes a visit to two secondary vocational schools, the Kiro Spangov Brko mechanical/electrical school and the Gorce Petrov forestry/woodwork School which are located in the Municipality of Kavadarci in the South-East region of FRM. There is also a Gymnasium, Dobri Dakalot, located in this Municipality.

There are 5,500 primary students and 2,200 secondary students in this Municipality - 1,300 attend the two vocational schools and the remaining 900 attend the Gymnasium.

The Gorce Petrov School provides extensive tuition in forestry, horticulture and woodwork. The forestry and horticultural programmes are particularly impressive. The school has its own vineyard and wine-producing facilities which are used both as a means of providing practical tuition for the students and as a way of earning additional income from the school. The wine is sold in the market-place and the income from the sale of these products is used to purchase equipment and educational material for the school.

The school also sells plants ranging from trees and shrubs to small bedding plants. However, there is relatively little public interest in the purchase of these products.

There is an extensive curriculum in the school of forestry which includes soil analysis, and the management, cultivation and harvesting of forests. Ecology studies and amenity horticulture are also included on the curriculum. There is a well resourced library in this school and, in general, the classrooms are well equipped with educational material. Surprisingly, there is relatively little tuition provided in commercial horticulture.

The school has a total staff of 57 which includes 3 practical agricultural instructors and 3 practical woodwork instructors in addition to teachers of general subjects and specialist subjects in forestry and agriculture.

The school owns 400 hectares of forestry. They have plans to construct a live-in training facility for forestry students. However, building work on the project has stopped due to lack of funds with which to purchase materials.

The equipment in the woodwork section is very out-of-date. With the exception of an electrically powered saw which was purchased recently, all the tools are manually operated. There was little evidence of the normal safety precautions in operation and the teachers appeared to have no knowledge or experience of CNC machines.

5.2 Case Study 2 - Visits to Schools in Prilep

This case study describes visits to five schools in the district of Prilep in the southern region of FRM. There is a gymnasium, a school for mining, woodwork, textiles and forestry (25th.Maj), an electrical/mechanical centre (R. Risrteski Ricko), a school for economy and trade Kuzman J. Pitu), and a school for food-processing and tobacco (H. Orde Copela).

There is a good relationship between the schools and local enterprises. The schools benefit from the fact that there are thriving local industries in tobacco, mining and furniture. Exceptionally, industry is represented on a curriculum committee and this ensures that the training provided is relevant to the needs of the local firms.

The woodwork school has run successful courses in upholstery and welding for the local furniture industry which were funded by the company. The school is in the process of setting up a specialised woodcarving course. This course will be the only one of its kind in FRM and it is anticipated that it will attract students from all over the country.

The school-boards have been very forward-looking and have had discussions with the Employment Bureau on the future skill requirements both of the district and of the country as a whole. The schools are in the process of introducing four new courses, a technician course in pharmacy in the medical school, a course in hairdressing and cosmetology (34 students), a veterinary technicians course in the Agricultural school, and a nurses programme (68). The schools expect 50% of enrolment on these courses to come from outside Prilep.

In addition to the introduction of new programmes, the school-boards have also made significant enhancements to the existing curricula. All students are taught computer appreciation and word- processing and enterprise studies were introduced into all courses for the first time in 1996 while the electrical/mechanical school is introducing modules on information technology to its programmes.

The most difficult problem confronting the VET system in Prilep is lack of finance which is reflected in poor buildings and out-of date equipment. For example, the workshop for the practical instruction in the electrical/mechanical centre is in poor condition, and plans to build a new workshop had to be abandoned due to lack of finance. The equipment in the electrical/mechanical centre and the woodwork centre is old and requires replacement.

5.3 Case Study 3 - Visit to School in Skopje

This "Traffic" school has 1,300 pupils and 80 teachers spread across 40 classes. The school is quite progressive and it has some good equipment in both the classrooms and the practical workshops. There is computerised diagnostic equipment for vehicle service and repair and there is a fully computerised vehicle testing machine. However there is only one antiquated test diesel engine available for instruction in a typical

class of c.30 pupils. There are also paint mixing and panel repair equipment in the auto-body workshop. The classrooms have the usual educational materials including videos, overhead projectors and the school also has a fully equipped computer room.

The students in this school undertake a considerable amount of income-earning activities and most of the money which is earned in this way is spent on updating the equipment. There are four principle ways in which the school earns income; repairing existing cars for the public; purchasing old cars and repairing and selling them; charging for driving lessons, and renting their facilities. The latter includes the renting out of the vehicle-testing equipment to the Department of Transport. All cars in FRM, irrespective of age, must undergo an annual vehicle road-worthy inspection test.

The school is currently in the process of building a showroom for the sale of repaired vehicles. The construction of this showroom has been approved by the school-board. However the general building quality in the main school needs upgrading and more classroom space is required. This points to an undue emphasis on production facilities and that a greater focus is needed on priority educational and infrastructure issues within the school.

The school attracts students from all over FRM and they stay in local boarding facilities. There are practical modules in the curriculum but the school has had difficulty placing students for the practical modules due to a shortage of suitable enterprises and currently, only 60 pupils are able to avail of on-the-job experience in garages.

The principle of the school identified low morale among teachers as one of the biggest problems confronting the education system in FRM. The official teachers salary is low in relation to the cost of living and it is difficult to dismiss teachers for poor performance. Against this background, the school has sought to enhance performance by offering bonus payments to good teachers - up to 30% of the official salary in some cases.

5.4 Case Study 4 - Visit to school in Bitola

This case study describes a visit to a electro-mechanical school (Gorgi Naumov) in Bitola in the south-west of FRM. This was the most progressive school seen by the consultants. It has 1,200 students and 80 teachers and a total staff compliment of 118. The school runs 2, 3, 4, and 5 year courses. The latter are specifically for experienced qualified workers who wish to further specialise.

The school produces rollers for the local power-generating plant and it earns a very considerable level of income in this way. This allows the school to purchase expensive modern equipment. The school has a fully-fitted machine-shop and tool-making facilities incorporating both CNC machines and robotics

The principle of the school is very progressive and forward-thinking in his outlook. He developed the CNC curriculum by first researching the skill needs of the industry and inviting engineers to assist the teachers in designing a suitable syllabus. He then sent the curriculum to the PIM for approval who in turn sent it to the Pedagogical Council. He then equipped a classroom with a simulated CNC machine ($100,000) and produced a training module.

Unlike many schools in FRM, there is good demand from students for the courses and classrooms are full. The library is well stocked and there are some books in English (through which some of the subjects are taught). There is a well appointed teachers room and health and safety standards are applied in the workshops.

The principle of the school has initiated intensive staff development courses for his teachers. The 1st phase of these courses involves 3-4 weekend sessions of lectures and presentations in which teachers are encouraged to develop an appreciation of the need for a new approach to teaching. This initiative covers 24 schools including 8 secondary vocational schools. In the 2nd. Phase of the programme, there is a synergetic analysis of the schools involved after which 3 schools are selected to implement the development of a teamwork approach to correcting weaknesses identified in the schools.

In addition to this initiative, the principle has also developed a successful school for gifted children.

The principle of the Gorgi Naumov school has many views on how to enhance the quality of vocational education in FRM. He has been successful in creating a highly motivated teacher group within the region and his school enjoys an excellent reputation throughout FRM. The school therefore represents an ideal location for the implementation, on a pilot basis, of some of recommendations of this report.

5.5 Case Study 5 - Visits to Schools in Tetova

There are 5 schools in this Municipality, a gymnasium, (Kiril Pejcinovik), a textile school, (Goce Stajceski), a school of economy (8th. Septemvri), an Agricultural school (Mosa Pijade) and a health school (Nicola Stejn).

The Government recently set up the school of economy in response to demands from parents and students for vocational courses in secretarial and administrative skills. This is one of the areas which is expected to increase in employment in the next few years. There are approximately 220 pupils attending this school and tuition is provided in both typing courses and technical secretary courses.

The Mose Pijade agricultural school has excellent facilities. There is an extensive farm attached to the school and it has a modern dairy production unit and a milk

packaging unit. The school also produces its own yoghurt which is of high quality and which is sold in the marketplace.

Although this school is primarily an agricultural college specialising in agriculture, horticulture and veterinary science, it also has a catering and traffic school. Both waiters/chefs and mechanics are quite successful in getting placed and there is a good level of contact between the school and local enterprises. Approximately 60% of pupils obtain work-experience and employers use the work placement period as a screening device for perspective employees. Each student keeps a log and he/she is marked on their practical work by the supervising teacher and a designated person in the workplace. Approximately, 30% of catering practical tuition is in private firms and the ratio is slightly lower for mechanics.

Equipment is generally quite good but limited in quantity. There is cut-away tractor and some engines for practical tuition of the agricultural mechanics. The schools provide instruction in 2 languages, Macedonian and Albanian. Computer courses are provided in each form.

The textile school of Goce Stojceski on the other hand has rather poor facilities. Indeed, in the view of the consultants, it was the least well-equipped of those schools selected for the case studies and requires a large investment to bring it up to an acceptable standard of equipage and infrastructure. There are 758 students and 47 teachers and a total staff compliment of 63. There is a relatively high proportion of Albanians attending the school and classes are provided in two shifts, 0700-1315 and 1330-1915, to facilitate instruction in both the Macedonian and Albanian languages.

Chapter 6: International Assistance

6.1 Past Assistance

The following table sums up the international assistance committed to the Republic over the last three years and indicates that there has been a certain specialisation between the donors. Following the assistance of Mr. Soros, a private individual, who provided the funds to settle the arrears with the IMF and World Bank, the intervention of these institutions has concentrated on supporting economic stabilisation and structural adjustment. The EBRD has supported the rehabilitation of infrastructure the banking system and enterprises restructuring. Bilateral donors have provided mainly humanitarian assistance and technical assistance linked to the macro-stabilisation and structural reform programmes. On a cumulative basis the European Union emerges as the largest single provider of assistance. So far its assistance has consisted of critical import aid.

Table 6.1
Assistance to the Former Yugoslav Republic of Macedonia
(Commitments in $mln.)

	1993	1994
1.Distribution by Donor		
Bilateral	*71.5*	*75.7*
Of which: *France	13.7	0.5
*Germany	6.4	23.6
*Netherlands	13.5	5
*UK	9.4	
*USA	6.5	21
European Union	73.3	39.7
Multilateral	*24*	*116.9*
Of which: *EBRD		30.7
*IMF	17	
*World Bank		80
NGO's *(Soros)*	*20.9*	*4.1*
GRAND TOTAL	189.7	237.2
2. Distribution by Sector		
Agriculture		
Banks and Credit	6.2	11
Industry and Trade	0.1	10
Energy	20	20.3
Transport and	18.1	40.6
Communication	1.7	6.8
Environment and natural	2.9	
resources		
Education	1.7	2

Health	21.4	12
Labour and social security	13.8	10.4
Administration and Government	91.7	108.7
Others	12	15.2
GRAND TOTAL	**189.7**	**237.2**

Assistance has been concentrated on institution building and support to the overall reform effort as evidenced by the high proportion of aid to the "administration and government sector". The productive sectors, energy, infrastructure and the social sectors have also been allocated substantial shares of the total, while human resources and environment have been up to now less favoured. Although the Republic did not become a Phare country until March 1996, the European Union has provided important assistance in the form of a "Phare Critical Aid Programme" which started before the Edinburgh summit with a commitment of MECU 10 for urgent needs. At the Edinburgh Council meeting of January 1993, the EU granted an additional MECU 100, of which MECU 25 under the Phare budget, MECU 25 under the ECHO programme, and MECU 50 bilaterally by the member states. The following table provides the detailed break-down of the Phare Critical Aid.

Table 6.2
Phare Critical Aid Programme

MECU	1992	1993	1994	1995
	5			
Pre-Edinburgh I (approved December 1992)	5			
*Medical Inputs		*30*		
Pre-Edinburgh II and Edinburgh (beginning 1993)		25		
*Critical Import Programme		1.50		
*Statistical Office (TA:0.5, Equipment:1)		2.50		
*Customs (TA:0.75, Equipment 1.75)		1		
*Aid Co-ordination Unit			*24.50*	
Allocation 1994			2	

*Census			7.50	
*Fuel Supply			15	
*Critical Aid				25
Allocation 1995				
*Fuel Supply Programme				7.50
*Critical Import Programme				16.50
*Implementation & Management				1

It is noteworthy that the bulk of past assistance has been typical emergency aid with medical inputs, critical imports, equipment and fuel supply programmes. In addition, a limited amount of technical assistance has been provided where it was necessary to complement critical aid in order to be efficient, notably the case with the health programme which supported pharmaceutical sector restructuring. In addition, assistance has been provided through: the customs programme intended to upgrade the system to European and international standards and conducted in relation to Eurocustoms; the statistical programme to upgrade the Statistical Office with Eurostat co-operation, support to the census; and support for the creation of an Aid Co-ordination Unit (ACU) to monitor all external aid. These projects have already familiarised the national counterparts who benefited from them with the Phare procedures and the specific constraints and advantages associated with programme aid.

Critical aid has generally been provided free of charge to social institutions but sold to the economic sectors in order to generate counterpart funds to be used in support of the national budget. Out of a total commitment of more than MECU 85 for this type of aid some MECU 60 have actually been delivered and as a result it is expected that MECU 50 to 60 will be generated by the end of 1999. An agreement has been reached with the Government on the sectors which will be eligible for the counterpart funds and proposals for specific projects within these sectors will be submitted by the Ministry of Development to a ministerial monitoring committee who will make the final selection.

Source: Phare Country Strategy Paper, July 1996

6.2 Present Phare assistance

The Phare strategy for 1996-99 will provide assistance in four areas:

- Support to the strengthening and the expansion of the enterprise sector.

As of 1996, support will be concentrated on launching an Integrated SME Development Programme to enhance the long-term sustainable growth and development of the SME sector, in addition to targeted assistance for the restructuring of the Stopanska Bank. In a medium-term perspective, it may be necessary to develop the ability of the entire commercial banking sector to manage the disbursement of the specific credit lines made available by international donors for the SME sector.

- Support for the Land Reform process and the development of the agricultural sector.

  Land reform is not a prerequisite to the establishment of a successful private agricultural sector and as long as it is not completed a key constraint to a dynamic and competitive agricultural sector will endure. For this reason, a first priority in 1996 will be the provision of technical assistance and related equipment for a reform of legislation and practice concerning land management (cadastre, land and real estate registration, privatisation and consolidation). In addition, with a view to adopting an agricultural policy based progressively on non-market distorting instruments and improving access to European Markets, an agricultural aid package (improvement of veterinary and phytosanitary controls, establishment of a European Strategy and Programme Unit, and improvement of selected animal genetic resources) will be funded.

  Medium term priorities are likely to include technical assistance with the transformation of ownership of the agro-kombinats, transfer of know-ho to specific branches of the agricultural and related agro-food industry, introduction of modern water and forestry management techniques; together with complementary technical assistance to accompany international funding institutions development loans.

- Support to the development of human resources and the restructuring of social policy.

  In 1996, intervention by PHARE in the field of human resources is likely to be limited to the financing of a TEMPUS programme for higher education reform. However, during the period of the MIP, a priority should be given to assisting a reform of the public administration, a restructuring of the social insurance sectors; and the strengthening of the capacity of the Ministry of Labour and Social Protection to develop an active labour market intervention strategy.

- Support to the overall growth and restructuring strategy through a General Technical Assistance Facility aimed at consolidating the sustainability of the reform process by strengthening economic and social institutions, involving the population in the development of democratic processes, complementing already implemented actions and strengthening the capacity to implement and monitor reforms.

In 1996, priority will be given to assistance in the approximation of legislation to European standards and development of the capacity of the national Statistical Office. In addition, a specific intervention in the form of technical assistance to the Aid Co-ordination Unit is foreseen. In the medium term, areas such as civil society, culture and tourism may be the subject of specific projects.

Finally, the Country Strategy underlines the need to use the other available EU programmes to complement the Phare efforts. Counterpart funds should be used in priority to organise the transition between critical aid and sustainable effective social insurance and social protection policies: they would provide some breathing space which would ease the undertaking of the major reforms, notable those of the pension and health sector which are primarily support by the World Bank. Multi-country programmes in customs and statistics should be continued with the view to carrying through past and on going actions. These two programmes concern areas which have a European dimension (custom regulations, classifications, etc.) but are essential for the reform process (customs to ease trade and levy taxes, statistics to monitor progress).

The Cross Border Co-operation programme between the former Yugoslav Republic of Macedonia and the Hellenic Republic will be largely focused on developing communication infrastructure and facilities, protecting the environment and stimulating economic and social development action in the immediate border areas. In order for the CBC to have the greatest impact possible the, often local, initiatives supported should be as far as possible integrated with the National Phare programme approach. Where possible this should imply a search for synergy effects between CBC projects and actions undertaken in the strategy framework of the National programme.

Source: Phare Country Strategy Paper 1996

6.3 Other Donors On-going and Planned Activities

External aid amounted to 237 million USD in 1994 and may be estimated to have been close to 220 million USD in 1995. The World Bank is by far the most important donor, yearly commitments being expected to be around 73 million USD by the end of 1999, while EBRD, IMF, EU and USAID are providing significant assistance of 20 to 35 million USD each year. The annual volume of aid is expected to decrease slightly in 1996 mainly due to bilateral donors. However, the figures remain incomplete and need to be adjusted.

The main objectives pursued by the other donors for the next four years may be summarised as follows:

* *Support to macro-economic stabilisation*

Here the World Bank and IMF are leaders. Direct support to the budget has been funded through an ERL and a STF followed by a stand by agreement (cf. Point 3.1 - Policy context). A SAL is now under discussion. Disbursements of these funds are

submitted to several policy reforms which are now mainly oriented to macro-economic management, trade liberalisation, agricultural sector and restructuring of socially owned enterprises. The refining of tax policy and of public expenditure management is also part of the effort for macro-economic stabilisation. Technical assistance to improve tax collection, to define tax laws, to implement a treasury system as well as support to improve public investment programmes are already underway, mainly through the WB and USAID.

* *Promote post privatisation restructuring and the development of the emerging private sector.*

Important funds are provided for credit lines targeted to SME and small borrowers. USAID, the GTZ, the World Bank, EBRD and IFAD have or will establish credit lines through local commercial banks. The GTZ and the World Bank will also provide technical assistance to the qualified banks to manage the operations. In addition, the banking sector receives significant support for restructuring mainly through the Bank Rehabilitation Agency (technical assistance funded by USAID) and the NB (technical assistance from IMF, USAID and the Dutch Government). Direct assistance is also given for restructuring of Stopanska Banka by the EBRD. The World Bank has initiated an important programme to assist the restructuring of the 25 largest loss making enterprises through the establishment of a labour redeployment programme including an evaluation of the viability of various units and in some cases through financial support. This programme is now nearly finished (except for the labour redeployment fund) however, a lot still needs to be done to restart enterprises notably by improving management and marketing capacity as well as to deal specifically with the cases of agriculture kombinats and of mining.

* *Support to the Agricultural Sector.*

This sector is widely recognised as one of the most important for income growth and receives support from three main donors. USAID is developing pilot projects in specific sectors (mainly dairy products and rural credit) but provides also technical assistance for policy design. The World Bank is preparing to implement in 1996 and important agriculture and private sector development project which will mainly deal with agricultural services (extension, agricultural research and veterinary) and access to credit for farmers. IFAD is also proposing a large project which will cover small holdings, farmer's groups and individual entrepreneurs. In this field, much remains to be done at the ministry level in order to improve agricultural policy design, carry out the privatisation of the agro-kombinats, develop market and information systems etc.

* *Support key infrastructure investments.*

At the moment, the main sectors taken into consideration for capital investments are energy, transport, communications and water resources. These sectors represent 66% of the PIP for 1995-1998. The most important projects are those financed by the World Bank and the EBRD: on the one hand, the EBRD telecommunications

project, and on the other hand the transit facilitation World Bank project which aims at upgrading parts of the East-West transit road. The EBRD is also funding important investments in the energy sector in order to improve energy efficiency and to reduce the country's dependence on oil imports. Water supply and water resources management are considered as crucial by several donors and benefit from external assistance (mainly from bilateral sources) for construction of water supply infrastructure and for the rehabilitation of irrigation facilities. However, such intervention still remains largely insufficient to cover the needs identified in the PIP.

* *Maintain a social safety net and promote active social policies.*

In this field, the main donors are USAID and the World Bank. The latter is financing a team of MOLSP in order to improve the efficiency of the welfare system and develop tools for the management of social services, mainly pensions. As far as the labour market is concerned, except for the important labour redeployment fund targeted at the employees of the 25 big loss-makers, very little is being done to enhance the capacity of the Ministry and of the Employment Office to undertake and implement active policies. The Ministry of Health has just reached an agreement with the World Bank which will fund the conducting of an important reform of the health care services.

A number of other areas are also benefiting from minor external support of which two deserve to be mentioned: protection of natural resources is an important field of intervention but donors are waiting for the national environmental action plan elaborated with the assistance of the World Bank which will be finalised in the near future; public administration reform is under discussion within the Government and a new civil servant status is to be established soon.

Source: Phare Country Strategy Paper, July1996

6.4 Donor activities in relation to VET

The British Council is assisting the Chamber of Commerce by the provision of language financial and management training as is the Carl Luisberg Institute Koln. Agreements on international co-operation in education have been signed between the MOE and Italy, Turkey, Slovenia, Turkey, Albania, Bulgaria and Poland.

UNESCO have organised seminars for professional training of school principals and pedagogical advisers and a project for integrated curricula in secondary education (water resource conservation in diverse ecological systems as an integrated learning model). UNESCO/UNDP have also produced a valuable report on *Public Expenditure on Education in the FRM,* UNICEF and Lincoln College(UK) have collaborated on the presentation of a project on *"Inter-Active Learning".*

The World Bank are supporting an investment project for education by initially commissioning studies on teacher training, curriculum reform, textbook initiative and a school mapping/rehabilitation programme. These actions are to support the

preparation of a major project focused on financing education, infrastructure, textbooks, curriculum and teacher training. The initial proposed expenditure of $10 million is expected to be targeted at the Primary School sector. Funding for Vocational Education has yet to be elaborated or agreed.

The Soros Foundation has been a significant donor in the education area. A number of projects are in process at present: Developing civil awareness, Youth drop-in Centres, Health education for children and adolescents, National supplementary undergraduate and post graduate programme(student placement abroad), Soros International House-English language training, Teachers resource centre in Bitola, Junior Achievement Programme in Secondary Schools and the Civil Society Centre in Skopje. Soros have indicated a willingness to consider co-funding of vocational education projects.

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ANNEXES

ANNEX 1

Current Groupings and Profiles

Occupation or Group of Occupations	Number of Educational Profiles Years of Duration			
	4	3	up to 2	Total
Agriculture	4	7	-	11
Veterinary	1	1	-	2
Forestry	2	3	-	5
Woodwork	2	4	2	8
Geology	2	1	-	3
Metallurgy	2	3	-	5
Mechanical	5	20	-	25
Elec. Tech	6	7	-	13
Chemistry	3	4	1	8
Food Processing	1	3	-	4
Textiles	6	5	-	11
Leather	2	3	-	5
Graphical	1	3	-	4
Civil Engineering	7	9	6	22
Geology	1	-	-	1
Traffic	8	8	-	16
Trade	1	1	-	2
Catering/ Tourism	1	3	4	8
Economy	1	-	-	1
Law	1	-	-	1
Bureau Tech.	1	1	-	2
Health	7	-	-	7
Per. Services	2	2	-	4
Arts	9	-	-	9
Physical	1	-	-	1
Fire Protection	1	1	-	2
Mining	1	2	-	3
Total	79	91	13	183

Proposed Groupings and Profiles

Occupation or Group of Occupations	Number of Educational Profiles Years of Duration			
	4	3	up to 2	Total
Agriculture & Veterinary	3	-	-	3
Forestry & Carpentry	3	4	3	10
Mining, Geology, Metallurgy	3	3	-	6
Mechanical Engineering	3	10	1	14
Electrical Engineering	4	5	-	9
Chemistry & Technology	4	3	1	8
Textile & Leather	6	5	-	11
Graphics	1	1	-	2
Construction & Geodesy	3	1	5	9
Communications	5	2	1	8
Catering & Tourism	1	3	-	4
Economy, Law & Trade	4	1	1	6
Health	5	-	1	6
Personal Services	1	2	1	4
Arts	11	-	-	11
Total	57	40	14	111

ANNEX 2

Existing Gymnasium Curriculum

1. Common General Education Subjects	*Year and No. of lessons*			
	I	II	III	IV
Macedonian language and literature*	4	4	4	
(pupils of the nationalities: Albanian language and literature; Turkish language and literature				
Foreign Language	3	3	3	3
Latin	2	-	-	-
History	2	2	2	-
Sociology	-	-	-	2
Philosophy	-	-	-	2
Logic	-	-	2	-
Mathematics	4	4	4	4
Physics	3	3	3	3
Chemistry	3	2	3	2
Biology	2	2	3	3
Geography	-	2	2	2
Informatics	2	2	-	-
Music	2	-	-	-
Art	-	2	-	-
Physical Education	2	2	2	2
Defence and Protection	-	2	-	-
TOTAL LESSONS:	**29**	**30**	**28**	**27**
II *Optional Subjects***				2
Programming and programme languages	-	-	-	2
Descriptive geometry	-	-	-	2
Psychology	-	-	-	2

Note: This curriculum is applied in classes with instruction in Albanian and Turkish.

*) Macedonian language and literature is taught to pupils of the nationalities in classes I to IV, 2 lessons per week.

**) One compulsory school subject is studied in the IV year depending on the interest of the pupils. The pupils are also offered other optional subjects and contents.

ANNEX 3

Proposed Teaching Plan Framework for Gymnasium Education

Ordinal Number	AREAS AND SUBJECTS	No. of Lessons per week/year								No. of Lessons in %
		I		II		III		IV		
		w.	y.	w.	y.	w.	y.	w.	y.	I - IV y.
1.	**GENERAL EDUCATION**									
1.	Macedonian language and literature, - for the pupils from the nationalities their mother tongue (Albanian, Turkish and Serbian) - Macedonian langugae and literature for the pupils from the nationalities	4 (2)	144 (72)	4 (2)	144 (72)	4 (2)	144 (2)	4 (2)	124 (66)	
2.	Mathematics	3	108	3	108	3	108	3	93	up to 75%
3.	1st Foreign Language	3	108	3	108	3	108	3	93	
4.	History	2	72	2	72	2	72	-	-	
5	Geography	2	72	2	72	-	-	-	-	
6.	Physics	2	72	2	72	-	-	-	-	
7.	Chemistry	2	72	2	72	-	-	-	-	
8.	Biology	2	72	2	72	-	-	-	-	
9.	Philosophy	-	-	-	-	-	-	3	93	
10.	Sociology	-	-	-	-	2	72	-	-	
11.	Psychology	-	-	-	-	2	72	-	-	
12.	Informatics	2	72	-	-	-	-	-	-	
II.	**ELECTIVE**	**4**	**144**	**5**	**180**	**7**	**252**	**9**	**279**	
1.										
2.										
3.										
4.										up to 25%
5.										
6.										
7.										
8.										
	TOTAL NUMBER OF LESSONS:	26	1008	25	972	23	900	22	744	
III..	**COMPULSORY ACTIVITIES**									
1.	Sport and sporting activites	-	140	-	140	-	140		140	
2.	Activities from the area of culture	-	70	-	70	-	70	-	70	
3.	Training for defense	-	-	-	70	-	-	-	-	
VI	OPTIONAL	up to 4	up to 144	up to 4	up to 144	up to 4	up to 144	up to 4	up to 144	

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ANNEX 4

Existing Health Curriculum

Vocation: Health
Education Profile: Dental Nurse-Technician
Occupation: Dental Nurse

No.	*Teaching Fields and Subjects*	*Year and No. of lessons* I	II	III	IV
A.	**GENERAL EDUCATION**	**21**	**21**	**13**	**11**
1.	Macedonian language and literature* (pupils of the nationalities: Albanian language and literature; Turkish language and literature	3	3	3	3
2.	Foreign language	2	2	2	2
3.	Music	1	-	-	-
4.	Art	-	1	-	-
5.	Physical and Health Education	2	2	2	2
6.	Defence and Protection	-	2	-	-
7.	Sociology	-	-	2	-
8.	History	2	3	-	-
9.	Geography	2	-	-	-
10.	Mathematics	3	2	-	-
11.	Physics	2	2	-	-
12.	Chemistry	2	2	2	2
13.	Biology	2	2	2	2
B.	**VOCATIONAL EDUCATION**	**8**	**9**	**16**	**19**
a)	Common Vocational				
1.	Latin	2	-	-	-
2.	Anatomy and physiology	4	-	-	-
3.	Hygiene with Health Education	2	-	-	-
4.	Medical Psychology	-	-	2	-
5.	Microbiology	-	2	-	-
b)	Special Vocational				
1.	Pathology	-	2	-	-
2.	Pharmacology	-	2	-	-
3.	Nursing of diseased	-	-	2+2	-
4.	Machines, instruments and dent. Mater.	-	3	-	-
5.	Dental diseases	-	-	2+3	-
6.	Mouth diseases	-	-	-	2+3
7.	Child and Preventative Dentistry	-	-	-	2+2
8.	Dental Surgery with Nursing	-	-	-	2+3
9.	Dental Prosthetics	-	-	2+3	-

10.	Orthodontia		-	-	-	2+3
c)	On-the-job practice		-	20	20	-
TOTAL A + B		29	30	29	30	

Note: This curriculum is applied in classes with instruction in Albanian and Turkish
*) Macedonian is taught to pupils of the nationalities from classes I to IV, 2 lessons per week

ANNEX 5

Existing Curriculum

Vocation: Electrical and Technical
Educational Profile: Electrical Technician for Electronics
Occupation: Electrical Technician for radio and video techniques; Electrical Technician for Industrial Electronics, Electrical Technician for Medical Devices

No.	*Teaching Fields and Subjects*	*Year and No. of lessons* I	II	III	IV
A.	**GENERAL EDUCATION**	**22**	**18**	**15**	**11**
1.	Macedonian language and literature* (pupils of the nationalities: Albanian language and literature; Turkish language and literature	3	3	3	3
2.	Foreign language	2	2	2	2
3.	Music	1	-	-	-
4.	Art	1	-	-	-
5.	Physical and Health Education	2	2	2	2
6.	Defence and Protection	-	2	-	-
7.	Sociology	-	-	2	-
8.	History	2	3	-	-
9.	Geography	2	-	-	-
10.	Mathematics	3	3	4	4
11.	Physics	2	2	2	-
12.	Chemistry	3	-	-	-
13.	Biology	2	-	-	-
B.	**VOCATIONAL EDUCATION**	**8**	**12**	**16**	**16**
a)	Common Vocational				
1.	Technical drawing with Descriptive Geometry	2	-	-	-
2.	Elements of Electro-Techniques	3	2	-	-
3.	Electro-technical materials	2	-	-	-
4.	Elements of Electronics	3	-	-	-
5.	Calculators	-	2	-	-
b)	Special Vocational				
1.	Measurements in Electronics	-	-	4	-
2.	Electronics	3	2	-	-
3.	Electronic Devices	2	-	-	-
4.	Impulse & Digital Electronics	-	-	-	4
5.	Communication Techniques	-	-	3	2
6.	Microprocessor Techniques	-	-	-	3

7.	Practical Training	-	5	3	4
Total Lessons A + B		30	30	31	27

Note: This curriculum is applied in classes with instruction in Albanian and Turkish.
*) Macedonian is taught to pupils of the nationalities from classes I to IV, 2 lessons per week.

ANNEX 6

Proposed teaching plan framework for three year vocational education

Ordinal Number	AREAS AND SUBJECTS	No. of Lessons per week/year						No. of Lessons in %
		I		II		III		
		w.	y.	w.	y.	w.	y.	I - III y.
1.	**GENERAL EDUCATION**							
1.	Macedonian language and literature, - for the pupils from the nationalities their mother tongue (Albanian, Turkish and Serbian) - Macedonian language and literature for the pupils from the nationalities	3 (2)	108 (72)	3 (2)	108 (2)	3 (2)	99 (66)	
2.	Foreign language	2	72	2	72	2	66	up to 35%
3.	History	2	72	-	-	-	-	
4.	Civic education	-	-	-	-	2	66	
5	.							
6.								
7.								
8.								
9.								
10.								
II.	**VOCATIONAL - THEORETICAL**							
a)	Common vocational subjects							
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
b)	Special vocational subjects							up to 30%
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
III	**PRACTICUM**							
1.	Practical instruction							up to 35%
2.	Activities from the area of culture							(min. 20%)
3.	Training for defense							
IV	**COMPULSORY ACTIVITIES**							
1.	Sport and sporting activities	-	70	-	70	-	70	
2.	Activities from the area of culture	-	35	-	35	-	35	
3.	Training for defense	-	-	-	70	-	-	
V.	**OPTIONAL**	up to 4	up to 144	up to 4	up to 144	up to 4	up to 132	

ANNEX 7

Proposed Teaching Plan Framework for four year Vocational Education

Ordinal Number	AREAS AND SUBJECTS	No. of Lessons per week/year								No. of Lessons in %
		I		II		III		IV		
		w.	y.	w.	y.	w.	y.	w.	y.	I - IV y.
1.	**GENERAL EDUCATION**									
1.	Macedonian language and literature, - for the pupils from the nationalities their mother tongue (Albanian, Turkish and Serbian) - Macedonian language and literature for the pupils from the nationalities	3 (2)	108 (72)	3 (2)	108 (72)	3 (2)	108 (2)	3 (2)	99 (66)	
2.	Foreign language	2	72	2	72	2	72	2	66	up to 40%
3.	History	2	72	-	-	-	-	-	-	
4.	Civic education	-	-	-	-	-	-	2	66	
5	.									
6.										
7.										
8.										
9.										
10.										
II.	**VOCATIONAL - THEORETICAL**									
a)	Common vocational subjects									
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
b)	Special vocational subjects									up to 35%
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
III	**PRACTICUM**									
1.	Practical instruction									
2.	Vocational practice									up to 15%
3.	Optional practice									
IV	**ELECTIVE**									
a)	Subjects in function of matura (graduation exam)									
1.										
2.										
3.										
b)	Subjects in function of final exam									up to 10%
1.										
2.										
3.										
V.	**COMPULSORY ACTIVITIES**									
1.	Sport and sporting activities	-	105	-	105	-	105		105	

2.	Activities from the area of culture	-	70	-	70	-	70	-	70	
3.	Training for defense	-	-	-	70	-	-	-	-	
VI	OPTIONAL	up to 4	up to 144	up to 4	up to 144	up to 4	up to 144	up to 4	up to 144	

ANNEX 8

Facilities of the "St. Cyril and Methodius" University of Skopje

Faculty of Natural Sciences and Mathematics
Faculty of Architecture
Faculty of Civil Engineering
Faculty of Mechanical Engineering
Faculty of Electrical Engineering
Faculty of Medicine
Faculty of Dental Medicine
Faculty of Pharmacy
Faculty of Agriculture
Faculty of Forestry
Faculty of Veterinary Medicine
Faculty of Economics
Faculty of Law
Faculty of Philosophy
Faculty of Philology
Faculty of Physical Culture
Faculty of Fine Arts
Faculty of Music
Faculty of Drama
Faculty of Technology and Metallurgy
Faculty of Pedagogy
Faculty of Mining and Geology - Stip
Faculty of Pedagogy - Stip

Faculties of the "St. Clement of Ohrid" University in Bitola

Faculty of Technical Engineering - Bitola
Faculty of Economics - Prilep
Faculty of Catering and Tourism - Ohrid
Teacher Training College - Bitola
School of Medicine - Bitola
School of Agriculture - Bitola

ANNEX 9

Establishment of a National Observatory in FRM

A National Observatory will be established by The European Training Foundation in FRM. The main objectives will be as follows:

- Validate and update existing studies on the VET system.
- Map the VET system.
- Gather information on trends and developments in VET.
- Conduct studies on labour market development.
- Analyse the need for international co-operation.
- Prepare national statistics on VET.
- Identify key actors in VET.
- Facilitate networking of key innovative persons and research institutions.
- Identify needs by the development of models and expertise for such analysis.

In the FRM there are a number of institutions where such an Observatory could be placed, including the MOE and PIM. However the latter two institutions are extremely busy with the general reform process in the education system and are overburdened with tasks at present.

A centre of excellence in VET has been established in Bitola Electro-Mechanical school and the Principal Mr Constatin Petrovski, has instituted an innovative management team-building and in-service training course for a number of schools in FRM. His Centre for Development and Training is well informed about developments in VET both in FRM and internationally. As the centre is one of the most pro-active institutions in relation to VET, it is suggested that the National Observatory be situated in the Centre for Development and Training in Bitola. The PIM should also be invited to participate in the Observatory by designating a member of staff to the Observatory as this would provide for the synergy required to fully inform all the actions of the Observatory in the context of on-going reforms in the FRM VET system.